

**U.S. ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
EMERGENCY PLANNING & COMMUNITY RIGHT-TO-KNOW  
INSPECTION REPORT**

**INSPECTION REPORT COVER SHEET**

<b>FACILITY NAME &amp; ADDRESS</b>  Mid-America Steel Drum Company 3950 South Pennsylvania Avenue St. Francis, Wisconsin 53209	<b>INSPECTION START DATE/TIME</b> February 28, 2017, at 9:30 am	<b>TYPE OF EPCRA INSPECTION</b>  311      312
	<b>INSPECTION END DATE /TIME</b> February 28, 2017, at 3:45 pm	<b>EPA FACILITY IDENTIFIER #</b>
<b>EPA INSPECTOR IN CHARGE</b> James Entzminger	<b>TITLE</b> EPCRA Inspector	<b>PHONE NUMBER</b> (312) 886-4062
<b>OTHER EPA INSPECTORS PRESENT</b> Brenda Whitney Kathryn Halbur	<b>TITLES</b> RCRA Inspector On-Scene Coordinator	<b>PHONE NUMBERS</b> (312) 353-4796 (920) 662-5424
<b>FACILITY REPRESENTATIVES</b> Mike Higgins Ian Boyle, CLCM Scott Bush, Greif, Inc. Steele Johns, Greif, Inc. Mark Ferguson, CLCM Robert Janowski, CLCM	<b>TITLE</b> Owner Corporate Environmental  Corporate Safety Plant Manager	<b>PHONE NUMBER</b>  (414) 762-1114
<b>OTHER INDIVIDUALS PRESENT</b> Linda Benfield, Foley & Lardner, LLP Amanda Beggs, Foley & Lardner, LLP Sarah Slack, Foley & Lardner, LLP Paul Grittner, WDNR Bryan Hartsook, WDNR Cathy Baerwald, WDNR  Benjamin Benninghoff, WDNR Mike Griffin, WDNR Tiffany Ziemer, US DOT/PHMSA Ted Turner, US DOT/PHMSA	<b>TITLE</b> Attorney Associate Attorney Waste Management Inspector Wastewater Inspector Remediation & Redevelopment Inspector Storm Water Inspector Air Inspector  Hazmat Transportation Inspector Hazmat Transportation Inspector	<b>PHONE NUMBER</b>  (414) 297-5825 (414) 319-7037 (608) 258-4239 (608) 266-0941 (414) 263-8512 (414) 263-8698  (414) 263-8576 (414) 263-8554  (701) 219-3249 (847) 294-8580

Mid-America Steel Drum Company  
St. Francis, Wisconsin  
EPCRA Inspection Report

### DESCRIPTION OF FACILITY

Mid-America Steel Drum Company (Mid-America) is located in a mixed residential and industrial area in St. Francis, Wisconsin (Attachment 1). There are residential dwellings about 750 feet north of the facility, about 1,500 feet east, about 750 feet south, and west across South Pennsylvania Avenue. In addition, there is an elementary school about 1,500 feet south of the facility, and Lake Michigan is about 6,000 feet east.

Container Lifecycle Management, LLC (CLCM) is an indirect joint-venture subsidiary of Greif, Inc. On November 4, 2013, CLCM purchased the operating assets of Mid-America and entered into a lease agreement with Mid-America, which remained to operate the business. CLCM has 50 employees in St. Francis, Wisconsin, and 120 employees corporate wide. CLCM operates facilities in St. Francis, Oak Creek, and Milwaukee, Wisconsin; Indianapolis, Indiana; Memphis, Tennessee; and Arkadelphia, Arkansas.

In St. Francis, Mid-America receives 5-gallon, 15-gallon, 30-gallon, and 55-gallon steel and plastic containers, cleans the containers, and reconditions them for reuse. Containers that cannot be reconditioned are destroyed. There is an on-site water treatment facility.

### OPENING CONFERENCE

The following people were part of the inspection.

*From the EPA:*

- James Entzminger, Emergency Planning and Community Right-to-Know Act (EPCRA) Inspector,
- Brenda Whitney, Resource Conservation and Recovery Act (RCRA) Inspector, and
- Kathryn Halbur, On-Scene Coordinator;

*From Greif, Inc.:*

- Mike Higgins, Owner,
- Ian Boyle, Corporate Environmental, CLCM,
- Scott Bush, Greif, Inc.,
- Steele Johns, Corporate Safety, Greif, Inc.,
- Mark Ferguson, Plant Manager, CLCM,
- Robert Janowski, CLCM,
- Linda Benfield, Attorney, Foley & Lardner, LLP representing Greif, Inc.,
- Amanda Beggs, Associate, Foley & Lardner, LLP representing Greif, Inc., and
- Sarah Slack, Attorney, Foley & Lardner, LLP representing Greif, Inc.;

*From the Wisconsin Department of Natural Resources:*

- Mike Griffin, Clean Air Act Inspector,
- Bryan Hartsook, Wastewater Inspector,
- Cathy Baerwald, Remediation and Redevelopment Inspector,
- Benjamin Benninghoff, Storm Water Inspector, and
- Paul Grittner, Waste Management Inspector; and

*From the U.S. Department of Transportation, under the auspices of the Pipeline and Hazardous Materials Safety Act:*

- Tiffany Ziemer, Hazmat Inspector, and

Mid-America Steel Drum Company  
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- Ted Turner, US DOT/PHMSA Hazmat Inspector.

Linda Benfield asked the participants to write their names, affiliations, and email addresses on the attendance sheet (Attachment 2). James Entzminger prepared the Notice of Inspection Form, and the signed Form is Attachment 3.

James Entzminger presented his EPA Inspector Credentials. Linda Benfield stated that any photos and information collected would be considered Confidential Business Information (CBI) until a further determination could be made concerning CBI. Photos taken during the inspection are in Attachment 4. Steele Johns informed the inspectors that the personnel protective equipment requirements included a hard hat, safety glasses with side-shields, hearing protection, and steel-toe shoes.

The RCRA inspection report will be prepared separately.

#### INSPECTOR'S FINDINGS

Mike Higgins, Ian Boyle, Scott Bush, Steele Johns, Mark Ferguson, Robert Janowski, Linda Benfield, Amanda Beggs, and Sarah Slack accompanied James Entzminger, Brenda Whitney, and Kathryn Halbur on their site tour. Other participants included Mike Griffin, Bryan Hartsook, Cathy Baerwald, Benjamin Benninghoff, Paul Grittner, Tiffany Ziemer, and Ted Turner.

The site tour began at the loading dock, where containers are off-loaded from the trailers. There James Entzminger observed a fork-lift truck powered by propane. Mark Ferguson stated that Mid-America has three fork-lift trucks powered by propane. Each fork-lift truck uses one propane cylinder as its fuel source. In addition, there are ten spare propane cylinders in a cage. Each propane cylinder contains 80 pounds of propane; therefore, the maximum amount of propane is  $(3+10)(80 \text{ pounds}) = 1,040$  pounds of propane, which is less than its 10,000-pound reporting threshold.

The next stop on the site tour was the area where the 55-gallon steel drums are cleaned. Mid-America uses sodium hydroxide to assist in the cleaning process. Mid-America has an air scrubber that uses sodium hydroxide 50% solution, and Mid-America uses sodium hydroxide 50% solution at the water treatment area. James Entzminger observed seven 55-gallon plastic containers of sodium hydroxide (385 gallons total). The maximum amount of sodium hydroxide, therefore, is  $(385 \text{ gallons})(1.49 \text{ specific gravity})(8.34 \text{ pounds per gallon of water})(50\%) = 2,392.12$  pounds, which is less than its 10,000-pound reporting threshold. Mid-America listed 8,000 pounds of sodium hydroxide on its Emergency and Hazardous Chemical Inventory Form (Tier II Form).

Mid-America uses muriatic acid (hydrochloric acid) 20 degree Baume (32% to 35%) to remove any rust. James Entzminger observed three 330-gallon totes containing hydrochloric acid (990 gallons). The maximum amount of hydrochloric acid is  $(990 \text{ gallons})(1.16 \text{ density})(8.34 \text{ pounds per gallon of water}) = 9,577.66$  pounds, which is less than its 10,000-pound reporting threshold. Mid-America included 6,000 pounds of hydrochloric acid on its Tier II Form.

In a separate storage area, James Entzminger observed five 55-gallon drums of acetone, each drum weighing 360 pounds based on their labels (1,800 pounds). The maximum amount of acetone is  $(5)(55 \text{ gallons})(0.79 \text{ specific gravity})(8.34 \text{ pounds per gallon of water}) = 1,811.87$  pounds, which is less than its 10,000-pound reporting threshold.

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At the waste water treatment area James Entzminger observed sulfuric acid and ferric chloride.

James Entzminger observed six 55-gallon drums of sulfuric acid, each drum weighing 660 pounds based on their labels (3,960 pounds). The maximum amount of sulfuric acid is  $(6)(55 \text{ gallons})(1.835 \text{ density})(8.34 \text{ pounds per gallon of water})(93\%) = 4,696.77$  pounds, which is greater than its 500-pound reporting threshold. Mid-America listed 4,000 pounds of sulfuric acid on its Tier II form.

James Entzminger observed six 55-gallon drums of ferric chloride, each drum weighing 600 pounds based on their labels (3,600 pounds). The maximum amount of ferric chloride is  $(6)(55 \text{ gallons})(1.45 \text{ specific gravity})(8.34 \text{ pounds per gallon of water}) = 3,990.69$  pounds, which is less than its 10,000-pound reporting threshold. Mid-America listed 3,000 pounds of ferric chloride on its Tier II Form.

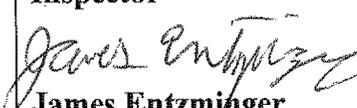
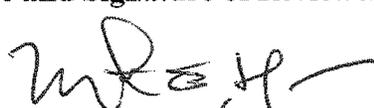
Mid-America did not have the Emergency Response Plan, Material Safety Data Sheets, or other hazardous chemical inventory documents available for review. On April 14, 2017, EPA mailed an information request (Attachment 5) to the attorney representing Mid-America to gather more facts about the facility and the chemical inventory.

On June 8, 2017, Mid-America responded to the information request (Attachment 6) and confirmed that CLCM purchased the operating assets of and entered into a lease agreement with Mid-America on November 4, 2013. As part of the response, Mid-America provided its Tier II Forms (Attachment 7) and Material Safety Data Sheets (Attachment 8) for calendar years 2013, 2015, and 2016. The response to question 23, about calendar year 2014, reported that only minor operations occurred at Mid-America that year and the chemicals on-site were below their Tier II reporting thresholds.

James Entzminger used the EPCRA Inspection Report (302-312) as a guide for the inspection and made notes on the report and the bound composition book (Attachment 9). James Entzminger drew a site map in his notes.

#### CLOSING CONFERENCE

James Entzminger, Brenda Whitney, and Kathryn Halbur met with Mike Higgins, Ian Boyle, Scott Bush, Steele Johns, Mark Ferguson, Robert Janowski, Linda Benfield, Amanda Beggs, and Sarah Slack for the closing conference. Other participants included Mike Griffin, Bryan Hartsook, Cathy Baerwald, Benjamin Benninghoff, Paul Grittner, Tiffany Ziemer, and Ted Turner. James Entzminger provided detailed inventory and chemical-release reporting requirements under EPCRA.

Names and Signature of Inspector	Agency/Office/Telephone Number	Date
 <b>James Entzminger</b>	<b>US EPA/CEPPS</b>  <b>(312) 886-4062</b>	<i>August 4, 2017</i>
Name and Signature of Reviewer	Agency/Office	Date
 <b>Michael E. Hans</b>	<b>USEPA/Region 5/ Chief CEPPS</b>	<i>8-9-17</i>

Mid-America Steel Drum Company  
St. Francis, Wisconsin  
EPCRA Inspection Report

**Attachments:**

- **Attachment 1 – Google Aerial Photographs**
- **Attachment 2 – Attendance Sign-in sheet**
- **Attachment 3 - Notice of Inspection Form**
- **Attachment 4 – Photographs**
- **Attachment 5 – EPCRA Information Request**
- **Attachment 6 – EPCRA Information Request Response**
- **Attachment 7 – Tier II forms from the company**
- **Attachment 8 – Material Safety Data Sheets**
- **Attachment 9 - EPCRA Inspection Report (302-312) and Inspector's notes**

3950 S Pennsylvania Ave - Google Maps

Google Maps 3950 S Pennsylvania Ave



3950 S Pennsylvania Ave - Google Maps

Google Maps 3950 S Pennsylvania Ave



https://www.google.com/maps/place/3950+S+Pennsylvania+Ave,+St+Francis,+WI+53235/@42.970963,-87.8770968,1491m/data=!3m1!1e3!4... 3/23/2017



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## NOTICE OF INSPECTION

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
 Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) and the  
 Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)

1. INVESTIGATION IDENTIFICATION			2. TIME	3. FIRM NAME
DATE	INSPECTOR NO.	DAILY SEQ. NO.	10:00 AM	Container Life Cycle Management 112 - American Street Drive
2/28/17				
4. INSPECTOR ADDRESS United States Environmental Protection Agency Region 5 77 West Jackson Boulevard Chicago, Illinois 60604				5. FIRM ADDRESS 3950 South Pansy Natic Avenue St. Francis, WI

REASON FOR INSPECTION: This inspection is for the purpose of determining compliance with the Emergency Planning and Community Right-to-Know Act of 1986 and Section 103 of the Comprehensive Environmental Response, Compensation and Liability Act as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA). The scope of this inspection may include, but is not limited to: reviewing and obtaining copies of documents and records; interviews and taking of statements; reviewing of chemical manufacturing, importing, processing, and/or use facilities, including waste handling and treatment operations; taking samples and photographs; and any other inspection activities necessary to determine compliance with the Act.

INSPECTOR SIGNATURE <i>James Entemir</i>		RECIPIENT SIGNATURE <i>[Signature]</i>	
NAME James Entemir		NAME John Boyer	
TITLE EPS	DATE SIGNED 2/28/17	TITLE UBCM	DATE SIGNED 2/28/17

PHOTO LOG: Facility Mid-America Steel Drum Company, City St. Francis, State Wisconsin Inspector James Entzminger  
Attachment 4

Picture #	Date	Time picture taken	Object being photographed	Position from where photo was taken	Specific place at facility where photo was taken	Name of person taking the picture	Names of witnesses present when photos were taken	Thumbnail
1	February 28, 2017	11:03 am	Empty 55-Gallon Drums on Loading Dock	West	Mid-America Steel Drum Company	James Entzminger		
2	February 28, 2017	11:13 am	Fork-lift Truck Powered by Propane	West	Mid-America Steel Drum Company	James Entzminger		
3	February 28, 2017	12:10 pm	330 Gallon Hydrochloric Acid/Muriatic Acid Totes	Southwest	Mid-America Steel Drum Company	James Entzminger		
4	February 28, 2017	12:12 pm	Grinding Booths	Northeast	Mid-America Steel Drum Company	James Entzminger		
5	February 28, 2017	12:19 pm	Paint Booths	West	Mid-America Steel Drum Company	James Entzminger		
6	February 28, 2017	12:28 pm	55-Gallon Drums of Caustic Soda by Scrubber	Southwest	Mid-America Steel Drum Company	James Entzminger		
7	February 28, 2017	12:29 pm	Caustic Soda Label	Southwest	Mid-America Steel Drum Company	James Entzminger		
8	February 28, 2017	12:41 pm	55-Gallon Drums of Ferric Chloride (Claimed Confidential)	West	Mid-America Steel Drum Company	James Entzminger		

PHOTO LOG: Facility Mid-America Steel Drum Company, City St. Francis, State Wisconsin Inspector James Entzminger  
Attachment 4

9	February 28, 2017	12:41 pm	Ferric Chloride Label including Weight 55-Gallon Drums of Caustic Soda by Waste Water	Down	Mid-America Steel Drum Company	James Entzminger	
10	February 28, 2017	12:42 pm	55-Gallon Drums of Sulfuric Acid by Waste Water	West	Mid-America Steel Drum Company	James Entzminger	
11	February 28, 2017	12:42 pm	55-Gallon Drums of Acetone	West	Mid-America Steel Drum Company	James Entzminger	
12	February 28, 2017	12:46 pm	Acetone Label Including Weight	West	Mid-America Steel Drum Company	James Entzminger	
13	February 28, 2017	12:47 pm	Oil-Water Separator	Down	Mid-America Steel Drum Company	James Entzminger	
14	February 28, 2017	12:54 pm	Used Oil Tank Propane Cylinder Storage Cage	West	Mid-America Steel Drum Company	James Entzminger	
15	February 28, 2017	12:56 pm		West	Mid-America Steel Drum Company	James Entzminger	
16	February 28, 2017	1:33 pm		West	Mid-America Steel Drum Company	James Entzminger	

PHOTO LOG: Facility \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Inspector \_\_\_\_\_

Picture #	Date	Time picture taken	Object being photographed	Position from where photo was taken	Specific place at facility where photo was taken	Name of person taking the picture	Names of witnesses present when photos were taken	Thumbnail
1			OPEN PUMP DRAIN	WEST DOCK				
2			PRO PUMP CARRY OVER	WEST DOCK				
3			MURKIN WATER TANK	WEST				
4			<del>PUMP</del> GRINDERS BEATERS	EAST				
5			PUMP BATTERY	WEST				
6			SODIUM SULFATE WATER	WEST				
7			OBITIC CONCRETE	SEWER				
8			SONIC CAMP MATERIAL	SEWER				
9			CONCRETE SEWER	SEWER				

PHOTO LOG: Facility \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Inspector \_\_\_\_\_

Picture #	Date	Time picture taken	Object being photographed	Position from where photo was taken	Specific place at facility where photo was taken	Name of person taking the picture	Names of witnesses present when photos were taken	Thumbnail
1			SAK Run Acid	South				
2			<del>SAK Run</del> SAK Run	South				
3			Water Tank Level	South				
4			Propane Tank storage area	South				
5								
6								
7								
8								
9								

## ATTACHMENT # 4

## PHOTOGRAPHS

SUBJECT: 55-Gallon Drums on Loading Dock

FACILITY: Mid-America Steel Drum Company, St. Francis, Wisconsin

## PHOTOGRAPHER

James Entzminger

## WITNESSES

## DATE

March 28,  
2017

## TIME

11:03  
am

## DIRECTION

West

## CAMERA

Nikon

## FILM

Digital

## PHOTOGRAPH NO.

1



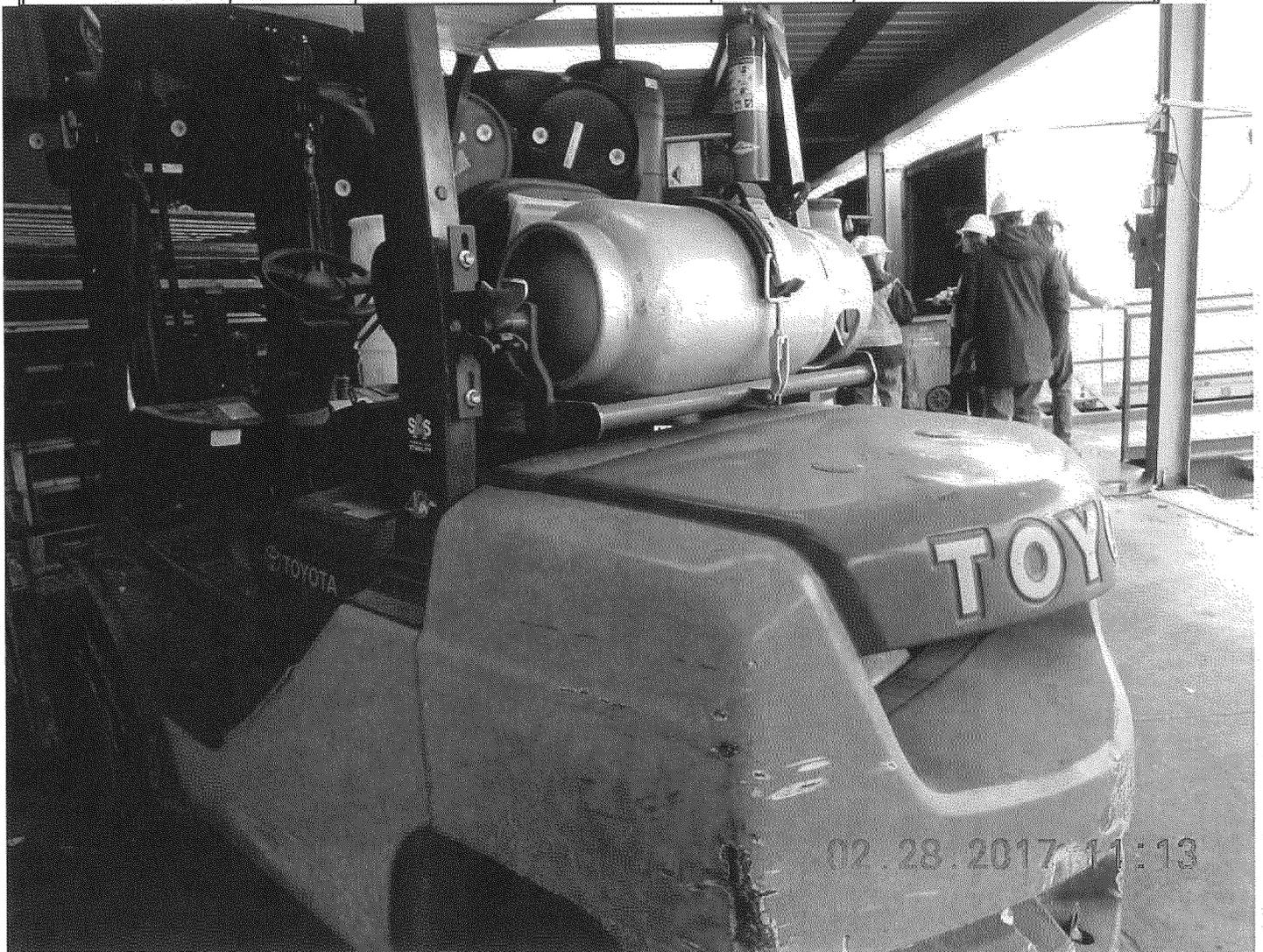
## ATTACHMENT # 4

## PHOTOGRAPHS

**SUBJECT: Fork-Lift Truck Powered by Propane**

**FACILITY: Mid-America Steel Drum Company, St. Francis, Wisconsin**

PHOTOGRAPHER			WITNESSES		
James Entzminger					
DATE	TIME	DIRECTION	CAMERA	FILM	PHOTOGRAPH NO.
March 28, 2017	11:13 am	West	Nikon	Digital	2



**ATTACHMENT # 4  
PHOTOGRAPHS**

**SUBJECT: 330-Gallon Muriatic Acid/Hydrochloric Acid Totes**

**FACILITY: Mid-America Steel Drum Company, St. Francis, Wisconsin**

**PHOTOGRAPHER  
James Entzminger**

**WITNESSES**

**DATE**

**March 28,  
2017**

**TIME**

**12:10  
pm**

**DIRECTION**

**Southwest**

**CAMERA**

**Nikon**

**FILM**

**Digital**

**PHOTOGRAPH NO.**

**3**



**ATTACHMENT # 4  
PHOTOGRAPHS**

**SUBJECT: Grinding Booths**

**FACILITY: Mid-America Steel Drum Company, St. Francis, Wisconsin**

**PHOTOGRAPHER  
James Entzminger**

**WITNESSES**

<b>DATE</b>	<b>TIME</b>	<b>DIRECTION</b>	<b>CAMERA</b>	<b>FILM</b>	<b>PHOTOGRAPH NO.</b>
<b>March 28, 2017</b>	<b>12:12 pm</b>	<b>Northeast</b>	<b>Nikon</b>	<b>Digital</b>	<b>4</b>



**ATTACHMENT # 4  
PHOTOGRAPHS**

**SUBJECT: Paint Booths**

**FACILITY: Mid-America Steel Drum Company, St. Francis, Wisconsin**

**PHOTOGRAPHER  
James Entzminger**

**WITNESSES**

**DATE  
March 28,  
2017**

**TIME  
12:19  
pm**

**DIRECTION  
West**

**CAMERA  
Nikon**

**FILM  
Digital**

**PHOTOGRAPH NO.  
5**



## ATTACHMENT # 4

## PHOTOGRAPHS

SUBJECT: 55-Gallon Drums of Sodium Hydroxide by Scrubber

FACILITY: Mid-America Steel Drum Company, St. Francis, Wisconsin

## PHOTOGRAPHER

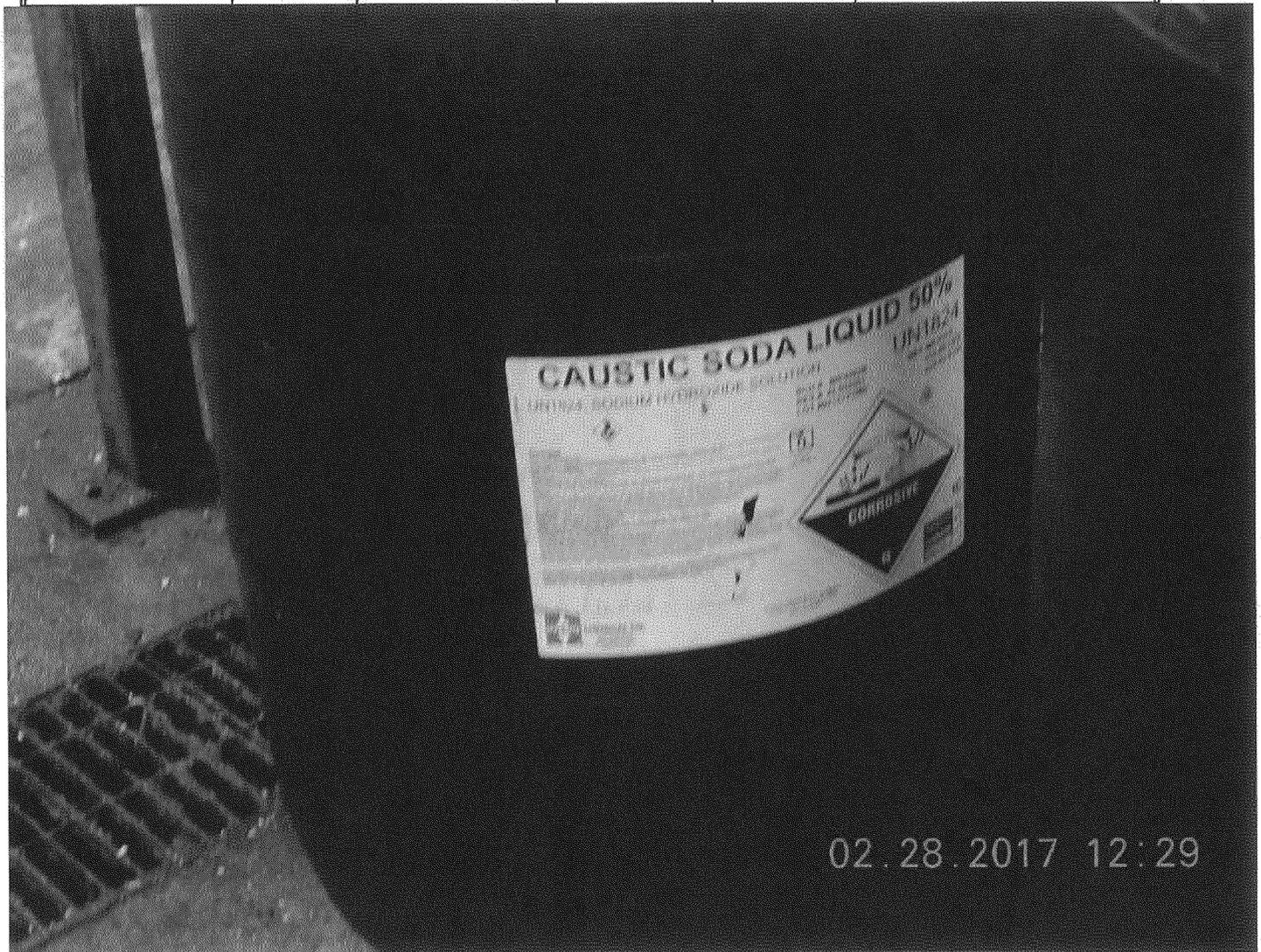
James Entzminger

## WITNESSES

DATE	TIME	DIRECTION	CAMERA	FILM	PHOTOGRAPH NO.
March 28, 2017	12:28 pm	Southwest	Nikon	Digital	6



<b>ATTACHMENT # 4</b>					
<b>PHOTOGRAPHS</b>					
<b>SUBJECT: Caustic Soda Label</b>					
<b>FACILITY: Mid-America Steel Drum Company, St. Francis, Wisconsin</b>					
<b>PHOTOGRAPHER</b> James Entzminger			<b>WITNESSES</b>		
<b>DATE</b> March 28, 2017	<b>TIME</b> 12:29 pm	<b>DIRECTION</b> Southwest	<b>CAMERA</b> Nikon	<b>FILM</b> Digital	<b>PHOTOGRAPH NO.</b> 7



**ATTACHMENT # 4****PHOTOGRAPHS****SUBJECT: 55-Gallon Drums of Ferric Chloride (claimed confidential)****FACILITY: Mid-America Steel Drum Company, St. Francis, Wisconsin****PHOTOGRAPHER****James Entzminger****WITNESSES**

<b>DATE</b>	<b>TIME</b>	<b>DIRECTION</b>	<b>CAMERA</b>	<b>FILM</b>	<b>PHOTOGRAPH NO.</b>
<b>March 28, 2017</b>	<b>12:41 pm</b>	<b>West</b>	<b>Nikon</b>	<b>Digital</b>	<b>8</b>

**ATTACHMENT # 4  
PHOTOGRAPHS**

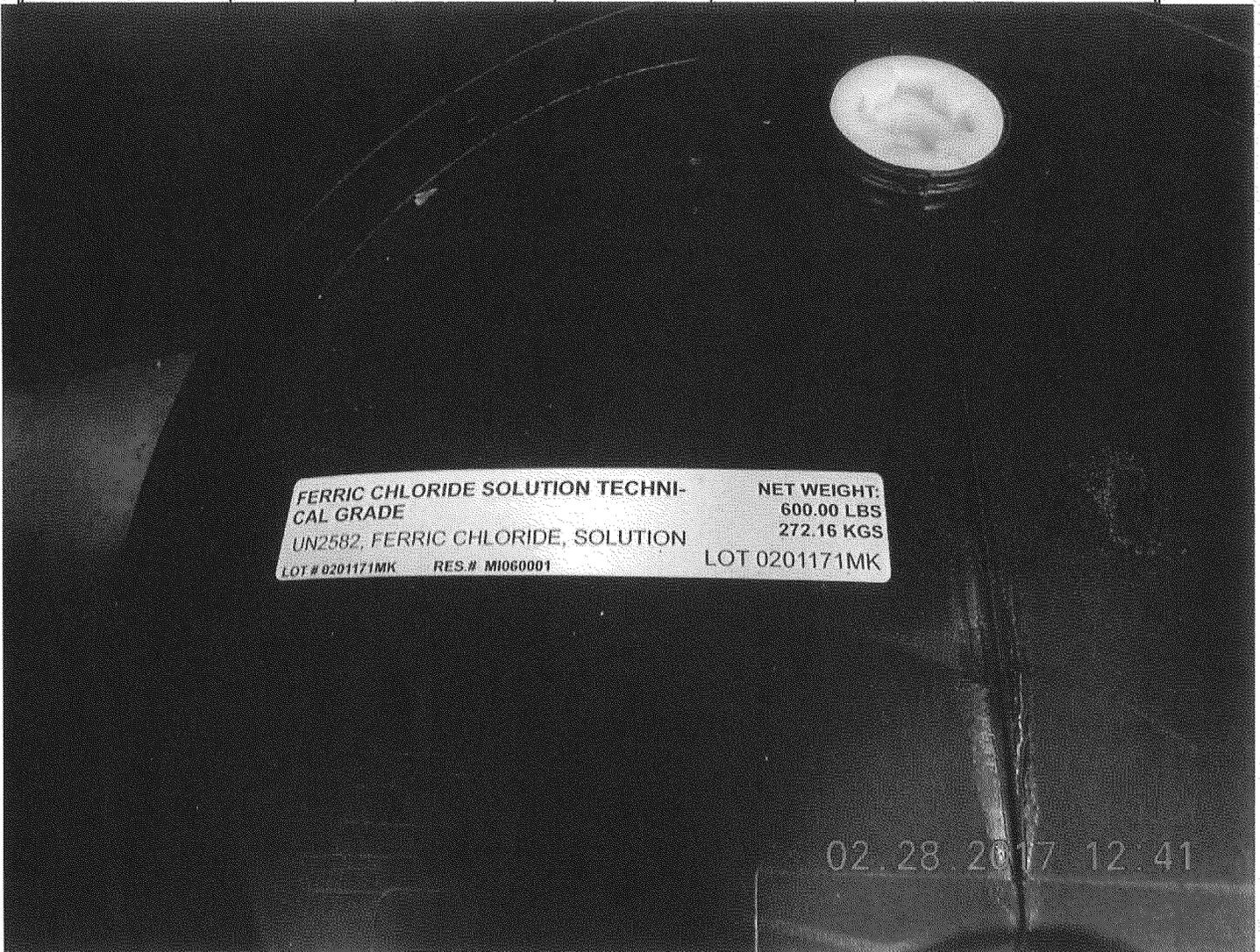
**SUBJECT: Ferric Chloride Label Including Weight**

**FACILITY: Mid-America Steel Drum Company, St. Francis, Wisconsin**

**PHOTOGRAPHER  
James Entzminger**

**WITNESSES**

<b>DATE</b>	<b>TIME</b>	<b>DIRECTION</b>	<b>CAMERA</b>	<b>FILM</b>	<b>PHOTOGRAPH NO.</b>
March 28, 2017	12:41 pm	Down	Nikon	Digital	9



## ATTACHMENT # 4

## PHOTOGRAPHS

SUBJECT: 55-Gallon Drums of Caustic Soda by Waste Water

FACILITY: Mid-America Steel Drum Company, St. Francis, Wisconsin

## PHOTOGRAPHER

James Entzminger

## WITNESSES

## DATE

March 28,  
2017

## TIME

12:42  
pm

## DIRECTION

West

## CAMERA

Nikon

## FILM

Digital

## PHOTOGRAPH NO.

10



## ATTACHMENT # 4

## PHOTOGRAPHS

SUBJECT: 55-Gallon Drums of Sulfuric Acid by Waste Water

FACILITY: Mid-America Steel Drum Company, St. Francis, Wisconsin

## PHOTOGRAPHER

James Entzminger

## WITNESSES

## DATE

March 28,  
2017

## TIME

12:42  
pm

## DIRECTION

West

## CAMERA

Nikon

## FILM

Digital

## PHOTOGRAPH NO.

11



**ATTACHMENT # 4**

**PHOTOGRAPHS**

**SUBJECT: 55-Gallon Drums of Acetone**

**FACILITY: Mid-America Steel Drum Company, St. Francis, Wisconsin**

**PHOTOGRAPHER**  
**James Entzminger**

**WITNESSES**

<b>DATE</b>	<b>TIME</b>	<b>DIRECTION</b>	<b>CAMERA</b>	<b>FILM</b>	<b>PHOTOGRAPH NO.</b>
<b>March 28, 2017</b>	<b>12:46 pm</b>	<b>West</b>	<b>Nikon</b>	<b>Digital</b>	<b>12</b>



**ATTACHMENT # 4**

**PHOTOGRAPHS**

**SUBJECT: Acetone Label Including Weight**

**FACILITY: Mid-America Steel Drum Company, St. Francis, Wisconsin**

**PHOTOGRAPHER**

**James Entzminger**

**WITNESSES**

**DATE**

**March 28,  
2017**

**TIME**

**12:47  
pm**

**DIRECTION**

**Down**

**CAMERA**

**Nikon**

**FILM**

**Digital**

**PHOTOGRAPH NO.**

**13**

**ACETONE**

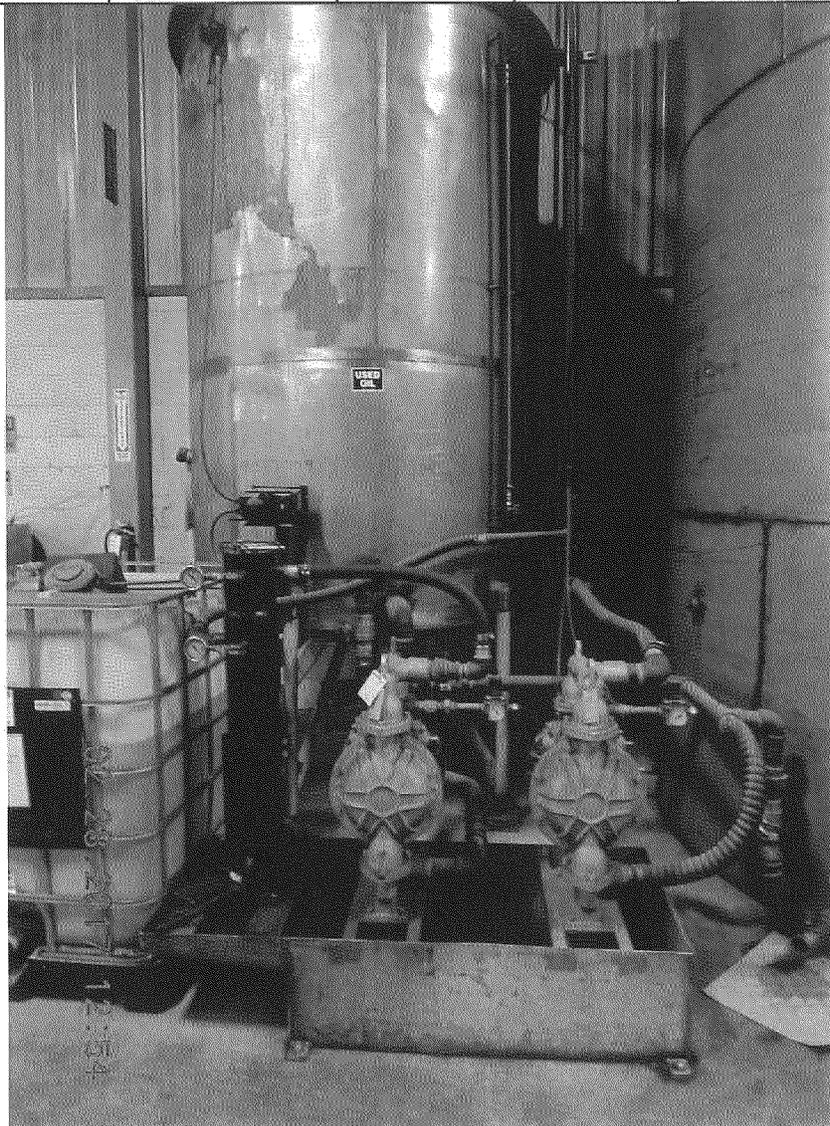
**UN1090, ACETONE**

**LOT # 0118171UP**

**RES.# OR010101**

**NET WEIGHT:  
360.00 LBS  
163.29 KGS**

**02.28.2017 12:47**

**ATTACHMENT # 4****PHOTOGRAPHS****SUBJECT: Oil-Water Separator****FACILITY: Mid-America Steel Drum Company, St. Francis, Wisconsin****PHOTOGRAPHER****James Entzminger****WITNESSES****DATE****March 28,  
2017****TIME****12:54  
pm****DIRECTION****West****CAMERA****Nikon****FILM****Digital****PHOTOGRAPH NO.****14**

**ATTACHMENT # 4****PHOTOGRAPHS****SUBJECT: Used Oil Tank****FACILITY: Mid-America Steel Drum Company, St. Francis, Wisconsin****PHOTOGRAPHER****James Entzminger****WITNESSES**

<b>DATE</b>	<b>TIME</b>	<b>DIRECTION</b>	<b>CAMERA</b>	<b>FILM</b>	<b>PHOTOGRAPH NO.</b>
<b>March 28, 2017</b>	<b>12:56 pm</b>	<b>West</b>	<b>Nikon</b>	<b>Digital</b>	<b>15</b>



**ATTACHMENT # 4**

**PHOTOGRAPHS**

**SUBJECT: Propane Cylinder Storage Cage**

**FACILITY: Mid-America Steel Drum Company, St. Francis, Wisconsin**

**PHOTOGRAPHER**  
James Entzminger

**WITNESSES**

DATE	TIME	DIRECTION	CAMERA	FILM	PHOTOGRAPH NO.
March 28, 2017	1:33 pm	West	Nikon	Digital	16





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
 REGION 5  
 77 WEST JACKSON BOULEVARD  
 CHICAGO, IL 60604-3590

APR 14 2017

REPLY TO THE ATTENTION OF:

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

Ms. Linda E. Benfield  
 Attorney  
 Foley & Lardner, LLP  
 777 East Wisconsin Avenue  
 Milwaukee, Wisconsin 53202-5306

Re: Request for Information Regarding EPCRA Sections 311 and 312 for the Mid-America Steel  
 Drum Company Facility, in St. Francis, Wisconsin

Dear Ms. Benfield:

The U.S. Environmental Protection Agency is currently investigating your client's compliance with Sections 311 and 312 of the Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986, 42 U.S.C. §§ 11021 and 11022. A facility is subject to the requirements of Sections 311 and 312 if the owner/operator is required to prepare or have available a Material Safety Data Sheet (MSDS) for a hazardous chemical under the Occupational Safety and Health Act (OSHA) of 1970 and if the hazardous chemical is present in an amount in excess of the threshold established for such chemical.

The reporting requirement covers all hazardous chemicals present at the facility at any one time in amounts equal to or greater than 10,000 pounds, and for all extremely hazardous chemicals present at the facility in an amount greater than or equal to 500 pounds or the threshold planning quantity, whichever is lower.

You are hereby requested to respond to the Information Request enclosed within 20 days of receipt of this letter. Please be advised that provision of false, fictitious, or fraudulent statements or representations may subject you to criminal fines or up to five years of imprisonment or both under 18 U.S.C. § 1001.

EPA has the authority to use the information requested herein in an administrative, civil, or criminal action. This Information Request is not subject to the approval requirements of the Paperwork Reduction Act of 1995, 44 U.S.C. § 3501, *et seq.*

Your response to this Information Request should be mailed to:

James Entzminger  
U.S. Environmental Protection Agency  
Chemical Emergency Preparedness  
and Prevention Section (SC-5J)  
77 West Jackson Boulevard  
Chicago, Illinois 60604

Please direct any questions you may have regarding this Information Request to James Entzminger at (312) 886-4062.

EPA strongly encourages you to give this matter your immediate attention and to respond to this Information Request within the time specified above.

Thank you for your cooperation in this matter.

Sincerely,

A handwritten signature in cursive script that reads "Silvia Palomo for m. H".

Michael E. Hans, Chief  
Chemical Emergency Preparedness  
and Prevention Section

Enclosures (3):

1. Information Request Definitions
2. Information Request Instructions
3. Information Request

## DEFINITIONS

For the purpose of the Instructions and the Information Request set forth herein, the following definitions shall apply:

1. The terms "you" or "Respondent" shall mean the organization or entity identified in the cover letter, and its officers, managers, employees, contractors, trustees and agents.
2. The term "person" as used herein, in the plural as well as the singular, shall mean any natural person, firm, contractor, corporation, partnership, trust or governmental entity, unless the context indicates otherwise.
3. "And" as well as "or" shall be construed either conjunctively or disjunctively as necessary to bring within the scope of this Information Request all information which might otherwise be construed to be outside their scope.
4. The terms "furnish," "describe," or "indicate" shall mean turning over to the EPA either original or duplicate copies of the requested information in the possession, custody, or control of the Respondent. Where specific information has not been memorialized in any document but is nonetheless responsive to a request, you must respond to the request with a written response. If such requested information is not in your possession, custody, or control then indicate where such information or documents may be obtained.
5. "Release" means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles) of any hazardous chemical, extremely hazardous chemical, or toxic chemical.
6. The term "hazardous chemical" shall have the same definition as that contained in Section 1910.1200(c) of Title 29 of the Code of Federal Regulations except that such term does not include the following:
  - a) Any food, food additive, color additive, drug, or cosmetic regulated by the Food and Drug Administration.
  - b) Any chemical present as a solid in any manufactured item to the extent exposure to the substance does not occur under normal conditions of use.
  - c) Any chemical to the extent it is used for personal, family, or household purposes, or is present in the same form and concentration as a product packaged for distribution and use by the general public.
  - d) Any chemical to the extent it is used in a research laboratory or a hospital or other medical facility under the direct supervision of a technically qualified individual.

- e) Any chemical to the extent it is used in routine agricultural operations or is a fertilizer held for sale by a retailer to the ultimate customer.
7. The term "extremely hazardous chemical" means a chemical on the list contained in Section 302(a)(2) of EPCRA.
  8. The term "toxic chemical" means a chemical on the list described in Section 313(c) of EPCRA.
  9. The term "environment" includes water, air, and land and the interrelationships which exist among and between water, air, and land and all living things.
  10. The terms "transport" or "transportation" mean the movement of a hazardous chemical by any mode, including pipeline, and in the case of a hazardous chemical which has been accepted for transportation by a common or contract carrier, the terms "transport" or "transportation" shall include any stoppage in transit which is temporary, incidental to the transportation movement, and at the ordinary operating convenience of a common or contract carrier, and any such stoppage shall be considered as a continuity of movement and not as the storage of a hazardous chemical.
  11. The term "facility" means all buildings, equipment, structures, and other stationary items which are located on a single or on contiguous or adjacent sites and which are owned or operated by the same person (or by a person who controls, is controlled by, or is under common control with such person).
  12. The term "material safety data sheet (MSDS)" means the sheet required to be developed under Section 1910.1200(g) of Title 29 of the Code of Federal Regulations, as that section may be amended from time to time.
  13. All terms not defined herein shall have their ordinary meaning, unless such terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. §§ 9601-9675, the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. §§ 6901-6991; 40 CFR Part 300 or 40 CFR Parts 260-280, in which case the statutory or regulatory definitions shall apply.

## INSTRUCTIONS

1. A separate response must be made to each of the questions set forth in this Information Request.
2. Precede each answer with the number in the Information Request to which it corresponds.
3. In answering each request, identify all contributing sources of information.
4. If information not known or not available to the Respondent as of the date of submission of its response should later become known or available, Respondent must supplement its response to EPA. Moreover, should the Respondent find, at any time after the submission of its response that any portion of the submitted information is false or misrepresents the truth, Respondent must notify EPA as soon as possible.
5. You must submit all required information under an authorized signature with the following certification:

I certify under penalty of law that I have examined and am familiar with the information in the enclosed documents, including all attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are, to the best of my knowledge and belief, true and complete.

6. The information requested herein must be provided notwithstanding its possible characterization as confidential information or trade secrets. You may, if you desire, assert a business confidentiality claim covering part or all of the information requested, in the manner described by 40 C.F.R. § 2.203(b). Information covered by such a claim will be disclosed by EPA only to the extent, and only by means of the procedures set forth in 40 C.F.R. Part 2, Subpart B. If no such claim accompanies the information when it is received by EPA, it may be made available to the public by EPA without further notice to you. You should read carefully the above-cited regulations before asserting a business confidentiality claim, since certain categories of information are not properly the subject of such a claim.

### INFORMATION REQUEST

1. Identify all persons consulted in the preparation of the answers to this request.
2. Identify all documentation consulted, examined, or referred to in the preparation of the answers to this request and provide copies of all such documents.
3. What is Mid-America Steel Drum Company (Mid-America)'s Standard Industrial Classification Code?
4. What is Mid-America's Dun & Bradstreet number?
5. What are Mid-America's annual sales for the most recently completed fiscal year?
6. How many employees are employed at Mid-America, St. Francis, Wisconsin?
7. How many employees are employed at Mid-America corporate wide?
8. Is Mid-America a RCRA facility? If so, provide the EPA Identification Number.
9. Provide a copy of your emergency plan which outlines the procedures for notification of accidental releases at your facility.
10. Provide documentation regarding the training of your employees on the procedures for notification of accidental releases at your facility.
11. Provide the name and current address of the owner(s) of the property located at 3950 South Pennsylvania Avenue, St. Francis, Wisconsin, during the time period of January 1, 2013, to the present.
12. Provide the name and current address of the operator(s) of the facility located at 3950 South Pennsylvania Avenue, St. Francis, Wisconsin, during the time period of January 1, 2013, to the present.
13. When did Mid-America began operations in St. Francis, Wisconsin?
14. If Mid-America was a corporation during the time period of January 1, 2013, to the present, provide a copy of the Articles of Incorporation.
15. If Mid-America was a subsidiary of a corporation during the time period of January 1, 2013, to the present, identify the parent corporation and provide copies of pertinent documents supporting the subsidiary relationship.

16. If Mid-America was a division of a corporation during the time period of January 1, 2013, to the present, identify the corporation and provide copies of pertinent documents supporting the claim that this company is a corporate division.
17. If Mid-America was a partnership during the time period of January 1, 2013, to the present, provide a copy of the partnership agreement.
18. If Mid-America was a trust during the time period of January 1, 2013, to the present, provide all relevant agreements and documents to support this claim.
19. Did Mid-America supply copies of all Material Safety Data Sheets (MSDSs), or a list of hazardous chemicals, for materials stored at this facility above a Threshold Planning Quantity (TPQ) and/or Reporting Threshold to the Wisconsin State Emergency Response Commission on or before October 17, 1987, or 90 days from the date the hazardous chemical became present at this facility? If so, provide documentation to support your claim.
20. Did Mid-America supply copies of all MSDSs, or a list of hazardous chemicals, for materials stored at this facility above a TPQ and/or Reporting Threshold to the Milwaukee County Local Emergency Planning Committee on or before October 17, 1987, or 90 days from the date the hazardous chemicals became present at this facility? If so, provide documentation to support your claim.
21. Did Mid-America supply copies of all MSDSs, or a list of hazardous chemicals, for materials stored at this facility above a TPQ and/or Reporting Threshold to the St. Francis Fire Department on or before October 17, 1987, or 90 days from the date the hazardous chemical became present at this facility? If so, provide documentation to support your claim.
22. Was Mid-America conducting business at 3950 South Pennsylvania Avenue, St. Francis, Wisconsin, during the time period of January 1, 2013, to December 31, 2013? If so, please respond to the following information requests:
  - a) Did Mid-America use, produce, manufacture, and/or store any hazardous chemicals at this location during the period of January 1, 2013, to December 31, 2013?
  - b) If Mid-America did use, produce, manufacture, and/or store any hazardous chemicals at this location, provide a list of such hazardous chemicals and the maximum quantity stored at this facility at any one given time during the period of January 1, 2013, to December 31, 2013.
  - c) For each hazardous chemical listed in number 22(b), provide an MSDS.

- d) Provide a copy of the Tier One or Tier Two form required under Section 312 of EPCRA, 42 U.S.C. § 11022, for the period of January 1, 2013, to December 31, 2013.
  - e) Did Mid-America supply a copy of each and every Tier One or Tier Two form provided under subparagraph (d) above to the Wisconsin State Emergency Response Commission for the period of January 1, 2013, to December 31, 2013, on or before March 1, 2014? If so, provide documentation to support your claim.
  - f) Did Mid-America supply a copy of each and every Tier One or Tier Two form provided under subparagraph (d) above to the Milwaukee County Local Emergency Planning Committee for the period of January 1, 2013, to December 31, 2013, on or before March 1, 2014? If so, provide documentation to support your claim.
  - g) Did Mid-America supply a copy of each and every Tier One or Tier Two form provided under subparagraph (d) above to the St. Francis Fire Department for the period of January 1, 2013, to December 31, 2013, on or before March 1, 2014? If so, provide documentation to support your claim.
23. Was Mid-America conducting business at 3950 South Pennsylvania Avenue, St. Francis, Wisconsin, during the time period of January 1, 2014, to December 31, 2014? If so, please respond to the following information requests:
- a) Did Mid-America use, produce, manufacture, and/or store any hazardous chemicals at this location during the period of January 1, 2014, to December 31, 2014?
  - b) If Mid-America did use, produce, manufacture, and/or store any hazardous chemicals at this location, provide a list of such hazardous chemicals and the maximum quantity stored at this facility at any one given time during the period of January 1, 2014, to December 31, 2014.
  - c) For each hazardous chemical listed in number 23(b), provide an MSDS. If you already provided an MSDS for a hazardous chemical in information request number 22, you need not provide another one for the same hazardous chemical.
  - d) Provide a copy of the Tier One or Tier Two form required under Section 312 of EPCRA, 42 U.S.C. § 11022, for the period of January 1, 2014, to December 31, 2014.
  - e) Did Mid-America supply a copy of each and every Tier One or Tier Two form provided under subparagraph (d) above to the Wisconsin State Emergency Response Commission for the period of January 1, 2014, to December 31, 2014, on or before March 1, 2015? If so, provide documentation to support your claim.

- f) Did Mid-America supply a copy of each and every Tier One or Tier Two form provided under subparagraph (d) above to the Milwaukee County Local Emergency Planning Committee for the period of January 1, 2014, to December 31, 2014, on or before March 1, 2015? If so, provide documentation to support your claim.
  - g) Did Mid-America supply a copy of each and every Tier One or Tier Two form provided under subparagraph (d) above to the St. Francis Fire Department for the period of January 1, 2014, to December 31, 2014, on or before March 1, 2015? If so, provide documentation to support your claim.
24. Was Mid-America conducting business at 3950 South Pennsylvania Avenue, St. Francis, Wisconsin, during the time period of January 1, 2015, to December 31, 2015? If so, please respond to the following information requests:
- a) Did Mid-America use, produce, manufacture, and/or store any hazardous chemicals at this location during the period of January 1, 2015, to December 31, 2015?
  - b) If Mid-America did use, produce, manufacture, and/or store any hazardous chemicals at this location, provide a list of such hazardous chemicals and the maximum quantity stored at this facility at any one given time during the period of January 1, 2015, to December 31, 2015.
  - c) For each hazardous chemical listed in number 24(b), provide an MSDS. If you already provided an MSDS in information request number 22 or 23, you need not provide another one for the same hazardous chemical.
  - d) Provide a copy of the Tier One or Tier Two form required under Section 312 of EPCRA, 42 U.S.C. § 11022, for the period of January 1, 2015, to December 31, 2015.
  - e) Did Mid-America supply a copy of each and every Tier One or Tier Two form provided under subparagraph (d) above to the Wisconsin State Emergency Response Commission for the period of January 1, 2015, to December 31, 2015, on or before March 1, 2016? If so, provide documentation to support your claim.
  - f) Did Mid-America supply a copy of each and every Tier One or Tier Two form provided under subparagraph (d) above to the Milwaukee County Local Emergency Planning Committee for the period of January 1, 2015, to December 31, 2015, on or before March 1, 2016? If so, provide documentation to support your claim.
  - g) Did Mid-America supply a copy of each and every Tier One or Tier Two form provided under subparagraph (d) above to the St. Francis Fire Department for the period of January 1, 2015, to December 31, 2015, on or before March 1, 2016? If so, provide documentation to support your claim.

25. Was Mid-America conducting business at 3950 South Pennsylvania Avenue, St. Francis, Wisconsin, during the time period of January 1, 2016, to December 31, 2016? If so, please respond to the following information requests:
- a) Did Mid-America use, produce, manufacture, and/or store any hazardous chemicals at this location during the period of January 1, 2016, to December 31, 2016?
  - b) If Mid-America did use, produce, manufacture, and/or store any hazardous chemicals at this location, provide a list of such hazardous chemicals and the maximum quantity stored at this facility at any one given time during the period of January 1, 2016, to December 31, 2016.
  - c) For each hazardous chemical listed in number 25(b), provide an MSDS. If you already provided an MSDS for a hazardous chemical in information request number 22, 23, or 24, you need not provide another one for the same hazardous chemical.
  - d) Provide a copy of the Tier One or Tier Two form required under Section 312 of EPCRA, 42 U.S.C. § 11022, for the period of January 1, 2016, to December 31, 2016.
  - e) Did Mid-America supply a copy of each and every Tier One or Tier Two form provided under subparagraph (d) above to the Wisconsin State Emergency Response Commission for the period of January 1, 2016, to December 31, 2016, on or before March 1, 2017? If so, provide documentation to support your claim.
  - f) Did Mid-America supply a copy of each and every Tier One or Tier Two form provided under subparagraph (d) above to the Milwaukee County Local Emergency Planning Committee for the period of January 1, 2016, to December 31, 2016, on or before March 1, 2017? If so, provide documentation to support your claim.
  - g) Did Mid-America supply a copy of each and every Tier One or Tier Two form provided under subparagraph (d) above to the St. Francis Fire Department for the period of January 1, 2016, to December 31, 2016, on or before March 1, 2017? If so, provide documentation to support your claim.



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414.271.2400 TEL  
414.297.4900 FAX  
WWW.FOLEY.COM

WRITER'S DIRECT LINE  
414.297.5825  
lbenfield@foley.com EMAIL

CLIENT/MATTER NUMBER  
110874-0103

June 8, 2017

Via E-Mail & FedEx

James Entzminger  
United States Environmental Protection Agency  
Chemical Emergency Preparedness and Prevention  
Section (SC-5J)  
77 West Jackson Boulevard  
Chicago, IL 60604  
Entzminger.James@epa.gov

Re: Response to Request to Provide Information Pursuant to  
Emergency Planning and Community Right-to-Know Act  
Dated April 14, 2017- Container Life Cycle Management LLC-  
St. Francis facility  
CONTAINS CONFIDENTIAL BUSINESS INFORMATION

Dear Mr. Entzminger:

On April 17, 2017, Foley & Lardner LLP received the United States Environmental Protection Agency's ("U.S. EPA") Emergency Planning and Community Right-to-Know Act, Sections 311 and 312 Information Request dated April 14, 2017 ("Information Request") directed to the "Mid-America Steel Drum Company Facility, in St. Francis, Wisconsin" located at 3950 South Pennsylvania Avenue, St. Francis, Wisconsin. Providing responses to the Information Request required locating and reviewing a large volume of documents. CLCM appreciates U.S. EPA's flexibility in granting an extension of the deadline to fully respond to the Information Request to June 8, 2017.

Documents responsive to this request are provided as PDFs and Microsoft Excel files on the flash drive which will be arriving via FedEx, with a corresponding Table of Contents as requested. The PDFs have been scanned for viruses using Workshare Professional.

Sincerely,

Linda E. Benfield

Enclosures (via FedEx only)  
cc w/o enc: Mark Furgason

BOSTON  
BRUSSELS  
CHICAGO  
DETROIT

JACKSONVILLE  
LOS ANGELES  
MADISON  
MIAMI

MILWAUKEE  
NEW YORK  
ORLANDO  
SACRAMENTO

SAN DIEGO  
SAN FRANCISCO  
SHANGHAI  
SILICON VALLEY

TALLAHASSEE  
TAMPA  
TOKYO  
WASHINGTON, D.C.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5

**RESPONSE OF  
CONTAINER LIFE CYCLE MANAGEMENT LLC TO  
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY'S  
EPCRA SECTIONS 311 AND 312 INFORMATION REQUEST**

**CONTAINS CONFIDENTIAL BUSINESS INFORMATION**

**June 8, 2017**

On April 17, 2017, Foley & Lardner LLP received the United States Environmental Protection Agency's ("U.S. EPA") Emergency Planning and Community Right-to-Know Act, Sections 311 and 312 Information Request dated April 14, 2017 ("Information Request") directed to the "Mid-America Steel Drum Company Facility, in St. Francis, Wisconsin" located at 3950 South Pennsylvania Avenue, St. Francis, Wisconsin (the "CLCM Facility"). U.S. EPA granted an extension of time for CLCM to respond to the Information Request to June 8, 2017.

Container Life Cycle Management LLC ("CLCM") is a joint venture that purchased the operating assets of the business from Mid-America Steel Drum Co., Inc. on November 4, 2013, and currently operates the CLCM Facility. CLCM is responding to the Information Request as it applies to CLCM's operations; to the extent U.S. EPA requests information that predates CLCM's operations, CLCM can put U.S. EPA in contact with the previous owner of the facility.

**GENERAL OBJECTIONS**

CLCM's objections are made without in any way waiving or intending to waive but, on the contrary, preserving and intending to preserve:

- (a) all questions and/or objections as to competency, relevancy, materiality, privilege, and admissibility as evidence for any purpose of the responses or subject matter thereof, in any subsequent proceeding involving CLCM;
- (b) the right to object on any ground to the use of these responses or the subject matter thereof in any subsequent proceeding involving CLCM; and
- (c) the right to object on any ground at any time to other requests or discovery procedures involving or relating to the subject of these responses.

These responses are based on, and therefore necessarily limited by, the records and information still in existence, presently recollected, and thus far discovered in the course of preparing these responses. CLCM reserves the right to supplement and make any changes to these responses if it appears at any time that omissions or errors have been made or that more accurate information is available.

CLCM objects to each and every instruction and request to the extent that it seeks information that is not relevant or otherwise beyond that authorized by the Emergency Planning and Community Right-to-Know Act.

CLCM objects to each and every instruction and request to the extent that it seeks information protected by the attorney/client privilege, the attorney work product doctrine, or any other applicable privilege or restriction, and CLCM has not included in this response copies of any such documents protected by such privileges, doctrines, or restrictions.

The following responses correspond to the numbered requests within the Information Request (the Information Request language is set forth in italics). All responses were prepared with the assistance and advice of counsel and such discussions are covered by attorney/client and attorney work product privileges.

### RESPONSE

**REQUEST NO. 1.** *Identify all persons consulted in the preparation of the answers to this request.*

**Response No. 1.** Mark Furgason, Geoff Westphal, Steele Johns, Ian Boyle, and Lauren Laabs of Mostardi Platt provided information used or considered in the responses to the Information Request or were otherwise consulted in the preparation of the responses to the Information Request.

**REQUEST NO. 2.** *Identify all documentation consulted, examined, or referred to in the preparation of the answers to this request and provide copies of all such documents.*

**Response No. 2.** To the extent documents were responsive to this Information Request, they have been provided with this Response.

**REQUEST NO. 3.** *What is Mid-America Steel Drum Company (Mid-America)'s Standard Industrial Classification Code?*

**Response No. 3.** The Standard Industrial Classification Code for the CLCM Facility is 7699 – Repair Shops and Related Services, Not Elsewhere Classified.

**REQUEST NO. 4.** *What is Mid-America's Dun & Bradstreet number?*

**Response No. 4.** The CLCM Facility's Dun & Bradstreet number is 04-130-7411.

**REQUEST NO. 5.** *What are Mid-America's annual sales for the most recently completed fiscal year?*

**Response No. 5.** CLCM's annual net sales for fiscal year 2016 were \$51,148,000.

THE INFORMATION PROVIDED IN RESPONSE TO THIS REQUEST NO. 5 IS CONFIDENTIAL BUSINESS INFORMATION.

**REQUEST NO. 6.** *How many employees are employed at Mid-America, St. Francis, Wisconsin?*

**Response No. 6.** The CLCM St. Francis facility has 50 full time employees.

**REQUEST NO. 7.** *How many employees are employed at Mid-America corporate wide?*

**Response No. 7.** CLCM has 120 employees corporate wide.

**REQUEST NO. 8.** *Is Mid-America a RCRA facility? If so, provide the EPA Identification Number.*

**Response No. 8.** The CLCM Facility is classified as a Small Quantity Generator ("SQG") with an EPA ID of WIR000131367.

**REQUEST NO. 9.** *Provide a copy of your emergency plan which outlines the procedures for notification of accidental releases at your facility.*

**Response No. 9.** A copy of the CLCM Facility's emergency plan is enclosed with this Response and labeled as document Bates No. CLCM-EPCRA-St. Francis-Q9-000001 to CLCM-EPCRA-St. Francis-Q9-000037.

**REQUEST NO. 10.** *Provide documentation regarding the training of your employees on the procedures for notification of accidental releases at your facility.*

**Response No. 10.** Training documents responsive to this request are enclosed with this Response and labeled as document Bates No. CLCM-EPCRA-St. Francis-Q10-000001 to CLCM-EPCRA-St. Francis-Q10-000003.

**REQUEST NO. 11.** *Provide the name and current address of the owner(s) of the property located at 3950 South Pennsylvania Avenue, St. Francis, Wisconsin, during the time period of January 1, 2013, to the present.*

**Response No. 11.** CLCM purchased the operating assets at this location on November 4, 2013 and entered into an Agreement of Lease with 17H LLC on that date. To the extent U.S. EPA requests information that predates CLCM's operations, CLCM can put U.S. EPA in contact with the previous owner of the facility.

**REQUEST NO. 12.** *Provide the name and current address of the operator(s) of the facility located at 3950 South Pennsylvania Avenue, St. Francis, Wisconsin, during the time period of January 1, 2013, to the present.*

**Response No. 12.** CLCM has operated at this location since November 4, 2013.

**REQUEST NO. 13.** *When did Mid-America began operations in St. Francis, Wisconsin?*

**Response No. 13.** CLCM has operated this location since November 4, 2013. CLCM purchased the operating assets of the business from Mid-America Steel Drum Co., Inc. To the extent U.S. EPA requests information that predates CLCM's operations, CLCM can put U.S. EPA in contact with the previous owner of the facility.

**REQUEST NO. 14.** *If Mid-America was a corporation during the time period of January 1, 2013, to the present, provide a copy of the Articles of Incorporation.*

**Response No. 14.** CLCM is a limited liability company.

**REQUEST NO. 15.** *If Mid-America was a subsidiary of a corporation during the time period of January 1, 2013, to the present, identify the parent corporation and provide copies of pertinent documents supporting the subsidiary relationship.*

**Response No. 15.** CLCM is an indirect joint venture subsidiary of Greif, Inc.

**REQUEST NO. 16.** *If Mid-America was a division of a corporation during the time period of January 1, 2013, to the present, identify the corporation and provide copies of pertinent documents supporting the claim that this company is a corporate division.*

**Response No. 16.** Not applicable.

**REQUEST NO. 17.** *If Mid-America was a partnership during the time period of January 1, 2013, to the present, provide a copy of the partnership agreement.*

**Response No. 17.** Not applicable.

**REQUEST NO. 18.** *If Mid-America was a trust during the time period of January 1, 2013, to the present, provide all relevant agreements and documents to support this claim.*

**Response No. 18.** Not applicable.

**REQUEST NO. 19.** *Did Mid-America supply copies of all Material Safety Data Sheets (MSDSs), or a list of hazardous chemicals, for materials stored at this facility above a Threshold Planning Quantity (TPQ) and/or Reporting Threshold to the Wisconsin State Emergency Response Commission on or before October 17, 1987, or 90 days from the date the hazardous chemical became present at this facility? If so, provide documentation to support your claim.*

**Response No. 19.** Not applicable. Please see Response No. 11.

**REQUEST NO. 20.** *Did Mid-America supply copies of all MSDSs, or a list of hazardous chemicals, for materials stored at this facility above a TPQ and/or Reporting Threshold to the Milwaukee County Local Emergency Planning Committee on or before October 17, 1987, or 90 days from the date the hazardous chemicals became present at this facility? If so, provide documentation to support your claim.*

**Response No. 20.** Not applicable. Please see Response No. 11.

**REQUEST NO. 21.** *Did Mid-America supply copies of all MSDSs, or a list of hazardous chemicals, for materials stored at this facility above a TPQ and/or Reporting Threshold to the St. Francis Fire Department on or before October 17, 1987, or 90 days from the date the hazardous chemical became present at this facility? If so, provide documentation to support your claim.*

**Response No. 21.** Not applicable. Please see Response No. 11.

**REQUEST NO. 22.** *Was Mid-America conducting business at 3950 South Pennsylvania Avenue, St. Francis, Wisconsin, during the time period of January 1, 2013, to December 31, 2013? If so, please respond to the following information requests:*

- (a) *Did Mid-America use, produce, manufacture, and/or store any hazardous chemicals at this location during the period of January 1, 2013, to December 31, 2013?;*
- (b) *If Mid-America did use, produce, manufacture, and/or store any hazardous chemicals at this location, provide a list of such hazardous chemicals and the maximum quantity stored at this facility at any one given time during the period of January 1, 2013, to December 31, 2013;*
- (c) *For each hazardous chemical listed in number 22(b), provide an MSDS;*
- (d) *Provide a copy of the Tier One or Tier Two form required under Section 312 of EPCRA, 42 U.S.C. § 11022, for the period of January 1, 2013, to December 31, 2013;*
- (e) *Did Mid-America supply a copy of each and every Tier One or Tier Two form provided under subparagraph (d) above to the Wisconsin State Emergency Response Commission for the period of January 1, 2013, to*

*December 31, 2013, on or before March 1, 2014? If so, provide documentation to support your claim;*

- (f) *Did Mid-America supply a copy of each and every Tier One or Tier Two form provided under subparagraph (d) above to the Milwaukee County Local Emergency Planning Committee for the period of January 1, 2013, to December 31, 2013, on or before March 1, 2014? If so, provide documentation to support your claim;*
- (g) *Did Mid-America supply a copy of each and every Tier One or Tier Two form provided under subparagraph (d) above to the St. Francis Fire Department for the period of January 1, 2013, to December 31, 2013, on or before March 1, 2014? If so, provide documentation to support your claim.*

**Response No. 22.** CLCM conducted business at 3950 South Pennsylvania Avenue St. Francis, Wisconsin, during the time period of November 4, 2013 to December 31, 2013.

- (a) The CLCM Facility did use, produce, manufacture, and/or store hazardous chemicals at this location during the period of November 4, 2013 to December 31, 2013.
- (b) The Tier 2 report which includes a list of the chemicals stored and the quantities stored that exceeded the reporting thresholds during the period of November 4, 2013 to December 31, 2013 is enclosed with this Response and labeled as document Bates No. CLCM-EPCRA-St. Francis-Q22(b)-000001 to Bates No. CLCM-EPCRA-St. Francis-Q22(b)-000007.

Personal credit card information has been redacted from the documentation submitted in response to this request. If such information is required it can be provided.

- (c) The MSDS for the chemicals listed in 22(b) are enclosed with this Response and labeled as documents Bates No. CLCM-EPCRA-St. Francis-Q22(c)-000001 to Bates No. CLCM-EPCRA-St. Francis-Q22(c)-000021.
- (d) Required forms for the period from November 4, 2013 to December 31, 2013 are enclosed with this Response and labeled as documents Bates No. CLCM-EPCRA-St. Francis-Q22(d)-(g)-000001 to Bates No. CLCM-EPCRA-St. Francis-Q22(d)-(g)-000007.

Personal credit card information has been redacted from the documentation submitted in response to this request. If such information is required it can be provided.

- (e) Copies of the forms provided in response to Request 22(d) were provided to Wisconsin Emergency Management, which is the State Emergency Response Commission, prior to March 1, 2014. Documentation responsive to this request is enclosed with this Response and labeled as documents Bates No. CLCM-EPCRA-St. Francis-Q22(d)-(g)-000001 to Bates No. CLCM-EPCRA-St. Francis-Q22(d)-(g)-000007.

Personal credit card information has been redacted from the documentation submitted in response to this request. If such information is required it can be provided.

- (f) Copies of the forms provided in response to Request 22(d) were made available to the Milwaukee County Local Emergency Planning Committee prior to March 1, 2014. Documentation responsive to this request is enclosed with this Response and labeled as documents Bates No. CLCM-EPCRA-St. Francis-Q22(d)-(g)-000001 to Bates No. CLCM-EPCRA-St. Francis-Q22(d)-(g)-000007.

Personal credit card information has been redacted from the documentation submitted in response to this request. If such information is required it can be provided.

- (g) Copies of the forms provided in response to Request 22(d) were made available to the St. Francis Fire Department prior to March 1, 2014. Documentation responsive to this request is enclosed with this Response and labeled as documents Bates No. CLCM-EPCRA-St. Francis-Q22(d)-(g)-000001 to Bates No. CLCM-EPCRA-St. Francis-Q22(d)-(g)-000007.

Personal credit card information has been redacted from the documentation submitted in response to this request. If such information is required it can be provided.

**REQUEST NO. 23.** *Was Mid-America conducting business at 3950 South Pennsylvania Avenue, St. Francis, Wisconsin, during the time period of January 1, 2014, to December 31, 2014? If so, please respond to the following information requests:*

- (a) *Did Mid-America use, produce, manufacture, and/or store any hazardous chemicals at this location during the period of January 1, 2014, to December 31, 2014?;*
- (b) *If Mid-America did use, produce, manufacture, and/or store any hazardous chemicals at this location, provide a list of such hazardous chemicals and the maximum quantity stored at this facility at any one given time during the period of January 1, 2014, to December 31, 2014;*
- (c) *For each hazardous chemical listed in number 23(b), provide an MSDS. If you already provided an MSDS for a hazardous chemical in information*

*request number 22, you need not provide another one for the same hazardous chemical;*

- (d) Provide a copy of the Tier One or Tier Two form required under Section 312 of EPCRA, 42 U.S.C. § 11022, for the period of January 1, 2014, to December 31, 2014;*
- (e) Did Mid-America supply a copy of each and every Tier One or Tier Two form provided under subparagraph (d) above to the Wisconsin State Emergency Response Commission for the period of January 1, 2014, to December 31, 2014, on or before March 1, 2015? If so, provide documentation to support your claim;*
- (f) Did Mid-America supply a copy of each and every Tier One or Tier Two form provided under subparagraph (d) above to the Milwaukee County Local Emergency Planning Committee for the period of January 1, 2014, to December 31, 2014, on or before March 1, 2015? If so, provide documentation to support your claim;*
- (g) Did Mid-America supply a copy of each and every Tier One or Tier Two form provided under subparagraph (d) above to the St. Francis Fire Department for the period of January 1, 2014, to December 31, 2014, on or before March 1, 2015? If so, provide documentation to support your claim.*

**Response No. 23.** CLCM was conducting minor operations at 3950 South Pennsylvania Avenue, St. Francis, Wisconsin, during the time period of January 1, 2014 to December 31, 2014. During the time period of January 1, 2014 to December 31, 2014 no chemicals exceeded the Tier 2 reporting thresholds at the site and no Tier report was required.

**REQUEST NO. 24.** *Was Mid-America conducting business at 3950 South Pennsylvania Avenue, St. Francis, Wisconsin, during the time period of January 1, 2015, to December 31, 2015? If so, please respond to the following information requests:*

- (a) Did Mid-America use, produce, manufacture, and/or store any hazardous chemicals at this location during the period of January 1, 2015, to December 31, 2015?;*
- (b) If Mid-America did use, produce, manufacture, and/or store any hazardous chemicals at this location, provide a list of such hazardous chemicals and the maximum quantity stored at this facility at any one given time during the period of January 1, 2015, to December 31, 2015;*
- (c) For each hazardous chemical listed in number 24(b), provide an MSDS. If you already provided an MSDS in information request number 22 or 23, you need not provide another one for the same hazardous chemical;*

- (d) *Provide a copy of the Tier One or Tier Two form required under Section 312 of EPCRA, 42 U.S.C. § 11022, for the period of January 1, 2015, to December 31, 2015;*
- (e) *Did Mid-America supply a copy of each and every Tier One or Tier Two form provided under subparagraph (d) above to the Wisconsin State Emergency Response Commission for the period of January 1, 2015, to December 31, 2015, on or before March 1, 2016? If so, provide documentation to support your claim;*
- (f) *Did Mid-America supply a copy of each and every Tier One or Tier Two form provided under subparagraph (d) above to the Milwaukee County Local Emergency Planning Committee for the period of January 1, 2015, to December 31, 2015, on or before March 1, 2016? If so, provide documentation to support your claim;*
- (g) *Did Mid-America supply a copy of each and every Tier One or Tier Two form provided under subparagraph (d) above to the St. Francis Fire Department for the period of January 1, 2015, to December 31, 2015, on or before March 1, 2016? If so, provide documentation to support your claim.*

**Response No. 24.** CLCM conducted business at 3950 South Pennsylvania Avenue, St. Francis, Wisconsin, during the time period of January 1, 2015 to December 31, 2015.

- (a) The CLCM Facility did use, produce, manufacture, and/or store hazardous chemicals at this location during the period of January 1, 2015 to December 31, 2015.
- (b) The Tier 2 report which includes a list of the chemicals stored and the quantities stored that exceeded the reporting thresholds during the period of January 1, 2015 to December 31, 2015 is enclosed with this Response and labeled as document Bates No. CLCM-EPCRA-St. Francis-Q24(b)-000001 to Bates No. CLCM-EPCRA-St. Francis-Q24(b)-000006.
- (c) MSDS for the chemicals listed in 24(b) are enclosed with this Response and labeled as documents Bates No. CLCM-EPCRA-St. Francis-Q24(c)-000001 to Bates No. CLCM-EPCRA-St. Francis-Q24(c)-000028.
- (d) Required forms for the period from January 1, 2015 to December 31, 2015 are enclosed with this Response and labeled as documents Bates No. CLCM-EPCRA-St. Francis-Q24(d)-(g)-000001 to Bates No. CLCM-EPCRA-St. Francis-Q24(d)-(g)-000006.
- (e) Copies of the forms provided in response to Request 24(d) were provided to Wisconsin Emergency Management, which is the State Emergency Response Commission, prior to March 1, 2016. Documentation

responsive to this request is enclosed with this Response and labeled as documents Bates No. CLCM-EPCRA-St. Francis-Q24(d)-(g)-000001 to Bates No. CLCM-EPCRA-St. Francis-Q24(d)-(g)-000006.

- (f) Copies of the forms provided in response to Request 24(d) were made available to the Milwaukee County Local Emergency Planning Committee prior to March 1, 2016. Documentation responsive to this request is enclosed with this Response and labeled as documents Bates No. CLCM-EPCRA-St. Francis-Q24(d)-(g)-000001 to Bates No. CLCM-EPCRA-St. Francis-Q24(d)-(g)-000006.
- (g) Copies of the forms provided in response to Request 24(d) were made available to the St. Francis Fire Department prior to March 1, 2016. Documentation responsive to this request is enclosed with this Response and labeled as documents Bates No. CLCM-EPCRA-St. Francis-Q24(d)-(g)-000001 to Bates No. CLCM-EPCRA-St. Francis-Q24(d)-(g)-000006.

**REQUEST NO. 25.** *Was Mid-America conducting business at 3950 South Pennsylvania Avenue, St. Francis, Wisconsin, during the time period of January 1, 2016, to December 31, 2016? If so, please respond to the following information requests:*

- (a) *Did Mid-America use, produce, manufacture, and/or store any hazardous chemicals at this location during the period of January 1, 2016, to December 31, 2016?;*
- (b) *If Mid-America did use, produce, manufacture, and/or store any hazardous chemicals at this location, provide a list of such hazardous chemicals and the maximum quantity stored at this facility at any one given time during the period of January 1, 2016, to December 31, 2016;*
- (c) *For each hazardous chemical listed in number 25(b), provide an MSDS. If you already provided an MSDS for a hazardous chemical in information request number 22, 23, or 24, you need not provide another one for the same hazardous chemical;*
- (d) *Provide a copy of the Tier One or Tier Two form required under Section 312 of EPCRA, 42 U.S.C. § 11022, for the period of January 1, 2016, to December 31, 2016;*
- (e) *Did Mid-America supply a copy of each and every Tier One or Tier Two form provided under subparagraph (d) above to the Wisconsin State Emergency Response Commission for the period of January 1, 2016, to December 31, 2016, on or before March 1, 2017? If so, provide documentation to support your claim;*
- (f) *Did Mid-America supply a copy of each and every Tier One or Tier Two form provided under subparagraph (d) above to the Milwaukee County Local Emergency Planning Committee for the period of January 1, 2016,*

*to December 31, 2016, on or before March 1, 2017? If so, provide documentation to support your claim;*

- (g) *Did Mid-America supply a copy of each and every Tier One or Tier Two form provided under subparagraph (d) above to the St. Francis Fire Department for the period of January 1, 2016, to December 31, 2016, on or before March 1, 2017? If so, provide documentation to support your claim.*

**Response No. 25.** CLCM conducted business at 3950 South Pennsylvania Avenue, St. Francis, Wisconsin, during the time period of January 1, 2016 to December 31, 2016.

- (a) The CLCM Facility did use, produce, manufacture, and/or store hazardous chemicals at this location during the period of January 1, 2016 to December 31, 2016.
- (b) The Tier 2 report which includes a list of the chemicals stored and the quantities stored that exceeded the reporting thresholds during the period of January 1, 2016 to December 31, 2016 is enclosed with this Response and labeled as document Bates No. CLCM-EPCRA-St. Francis-Q25(b)-000001 to Bates No. CLCM-EPCRA-St. Francis-Q25(b)-000006 .
- (c) MSDS for the chemicals listed in 25(b) are enclosed with this Response and labeled as documents Bates No. CLCM-EPCRA-St. Francis-Q25(c)-000001 to Bates No. CLCM-EPCRA-St. Francis-Q25(c)-000281.
- (d) Required forms for the period from January 1, 2016 to December 31, 2016 are enclosed with this Response and labeled as documents Bates No. CLCM-EPCRA-St. Francis-Q25(d)-(g)-000001 to Bates No. CLCM-EPCRA-St. Francis-Q25(d)-(g)-000006.
- (e) Copies of the forms provided in response to Request 25(d) were provided to Wisconsin Emergency Management, which is the State Emergency Response Commission, prior to March 1, 2017. Documentation responsive to this request is enclosed with this Response and labeled as documents Bates No. CLCM-EPCRA-St. Francis-Q25(d)-(g)-000001 to Bates No. CLCM-EPCRA-St. Francis-Q25(d)-(g)-000006.
- (f) Copies of the forms provided in response to Request 25(d) were made available to the Milwaukee County Local Emergency Planning Committee prior to March 1, 2017. Documentation responsive to this request is enclosed with this Response and labeled as documents Bates No. CLCM-EPCRA-St. Francis-Q25(d)-(g)-000001 to Bates No. CLCM-EPCRA-St. Francis-Q25(d)-(g)-000006.
- (g) Copies of the forms provided in response to Request 25(d) were made available to the St. Francis Fire Department prior to March 1, 2017.

Documentation responsive to this request is enclosed with this Response and labeled as documents Bates No. CLCM-EPCRA-St. Francis-Q25(d)-(g)-000001 to Bates No. CLCM-EPCRA-St. Francis-Q25(d)-(g)-000006.

AS TO OBJECTIONS:

CONTAINER LIFE CYCLE MANAGEMENT  
LLC

Dated: June 8, 2017

By:

  
Linda E. Benfield  
Attorney for Container Life Cycle  
Management LLC

**ADDRESS:**

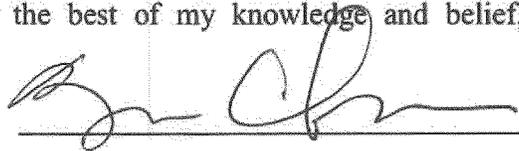
Foley & Lardner LLP  
777 East Wisconsin Avenue  
Milwaukee, WI 53202-5306  
*lbenfield@foley.com*

**AFFIDAVIT OF KEVIN MEYER**

STATE OF WISCONSIN            )  
   ) ss.  
 COUNTY OF MILWAUKEE        )

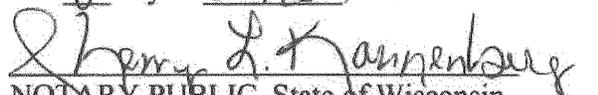
Kevin Meyer, being first duly sworn on oath, states as follows:

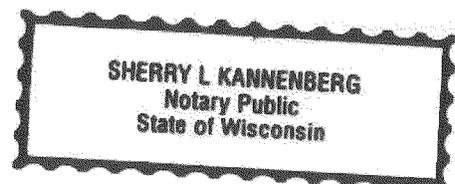
- (1) I am the Plant Manager of and am familiar with the facility owned by Container Life Cycle Management LLC ("CLCM") located at 8570 South Chicago Road, Oak, Creek, Wisconsin.
- (2) I make this affidavit in support of CLCM's response to the United States Environmental Protection Agency's ("U.S. EPA") request pursuant to Sections 311 and 312 of the Emergency Planning and Community Right-to-Know Act for information regarding the facility located at 8570 South Chicago Road Oak Creek, Wisconsin dated June 8, 2017 (the "Response").
- (3) The objections asserted in the Response are authorized by CLCM.
- (4) CLCM has completed a diligent record search and a diligent interviewing process with employees who may have relevant knowledge of the operations and activities at the facility that are the subject of the Response.
- (5) To the best of my knowledge, based upon the information currently in CLCM's possession and subject to the objections asserted in the Response, this Response is true, correct and accurate. CLCM reserves the right to revise, amend and/or update the Response in the future if CLCM obtains additional relevant or responsive information.
- (6) I certify under penalty of law that I have examined and am familiar with the information in the enclosed documents, including all attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are, to the best of my knowledge and belief, true and complete.



Kevin Meyer  
Plant Manager

Subscribed and sworn to before me  
this 8 day of June, 2017

  
 NOTARY PUBLIC, State of Wisconsin  
 My Commission is/expires: 1-17-2020



**WISCONSIN 2013 EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY**  
**WISCONSIN EMERGENCY MANAGEMENT**  
 PO Box 7978, Madison, WI 53707-7978  
 DMA 1004 (R11-09) Wis. Stat 323.60  
 Phone: 608-242-3221

Reporting Period From January 1, 2013 to December 31, 2013  
 Annual  Revision  Facility Information is changed from Last Submission

Facility Identification		Owner/Operator Details	
ID	31970	Name	MID-AMERICA STEEL DRUM COMPANY INC
Name	Mid-America Steel Drum Company Inc/Kitzinger	Address	8570 S. CHICAGO RD, OAK CREEK, WI 53154
Street	2529 EAST NORWICH AVENUE	City	SAINT FRANCIS
State	WI	Zip	53235
County	MILWAUKEE COUNTY	Phone	(414) 762-1114
LEPC Name	Milwaukee County LEPC	Parent Company Details	Name : Address : Phone : Dun and Brad No :
Lat/Long	42.9718308,-87.8780582	Tribe	<input type="checkbox"/>
Contact Name	MARK FURGASON	Fire Department	ST FRANCIS FIRE DEPT
Fax		Phone	(414) 483-8800
Maximum Occupants	10	Email	mfurgason@masdinc.com
		<input checked="" type="checkbox"/> Manned	<input type="checkbox"/> Unmanned

SIC Code : 3412 Dun & Brad No : 963884767  
 NAICS : 332439 TRIEID :  
 Subject to Emergency Planning under Section 302 of EPCRA (40 CFR part 355)?  Yes  No  
 Subject to Chemical Accident Prevention under Section 112(f) of CAA (40 CFR part 68, Risk Management Program)?  Yes  No  
 Subject to Toxic Release Inventory under Section 313 of EPCRA (40 CFR part 372)? TRI Facility ID :  Yes  No

Mailing Address if different from Facility ID Address  
 Company : MID-AMERICA STEEL DRUM COMPANY  
 Attn : MARK FURGASON  
 INC/KITZINGER  
 Street : 2529 EAST NORWICH AVENUE  
 Address 1 :  
 City : SAINT FRANCIS  
 State : WI  
 Zip : 53235  
 Country : United States

Emergency Contacts	Name	Title	Phone	Email
1	MARK FURGASON	Kitzinger Site Manager	(414) 483-8800	mfurgason@masdinc.com
2	ROBERT JANOWSKI	Operations Manager	(414) 483-8800	rfurgason@masdinc.com

Certification: I certify under penalty of law that I have personally examined and am familiar with the information submitted, and that based on my inquiry of those individuals responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.  
 Mark Furgason, Kitzinger Site Manager  
 Date: 3/3/2014 3:03 PM  
 Telephone Number: (414) 483-8800  
 Signature: Mark Furgason

Optional Attachments  
 Site Plan  
 Site Coordinate Abbreviations  
 Other Safeguard measures

**WISCONSIN 2013 EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY**

Facility Name : Mid-America Steel Drum Company Inc/Kitzinger ID : 31970

Reporting Period From January 1, 2013 to December 31, 2013

Reporting Exemption  Exempt  Not Exempt**Reason for Reporting Exemption (See Resources for definitions of Fee/Reporting Exemptions)**

- a. This facility is not covered by the OSHA Hazard Communication Act and is not a private or public agency as defined by s. 323.60 (1)(b) and (i).
- b. Per OSHA Hazard Communication Act regulations, hazardous chemicals present at this facility are not required to have Material Safety Data Sheets prepared for them or available to the facility because of one or more of the eight reporting exemptions at CFR Chapter 29, Section 1910.1200(b). (See Resources link for eight OSHA Reporting Exemptions)
- c. Hazardous chemicals at this facility fall under one or more of the section 311(e) reporting exemptions. (See Resources for five 311(e) Reporting Exemptions)
- d. This is a Retail Gas Station and the higher reporting thresholds for gasoline and diesel fuel apply. (See instructions in the Resources link)

Fee Exemption  Exempt  Not Exempt**Reason for Fee Exemption**

- a. The operator of this facility had fewer than 10 full-time equivalent employees (20,080 hrs.) in the state of Wisconsin in 2013. There were a Total of 80 full-time equivalent employees.
- b. This is a Federal or federally recognized Tribal facility.

Partial Fee Exemption  Exempt  Not Exempt**Reason for Partial Fee Exemption (See Resources for definitions of Fee/Reporting Exemptions)**

- a. Chemical is gasoline and/or diesel fuel present in reportable quantities and held for resale or retail at a petroleum marketing facility.
- b. Chemical is gasoline and/or diesel fuel at a retail gas station was stored in a tank(s) entirely underground, and 2) the facility was in compliance with all applicable Underground Storage program requirements at all times during the preceding calendar year, and 3) less than 75,000 gallons of gasoline and/or 100,000 gallons of diesel fuel were present any one time.
- c. Chemical is sand and/or gravel present in reportable quantities.
- d. Chemical is calcium chloride, sodium chloride and/or calcium magnesium acetate present in reportable quantities and used as a road deicing agent.
- e. Chemical is reported voluntarily and is not present in reportable quantities or exempt from reporting for Section 311(e) (MSDS/Chemical List), Section 312 (annual Tier Two Reporting), and the OSHA Hazard Communications Act regulations.

**WISCONSIN 2013 EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY**  
 Facility Name : Mid-America Steel Drum Company Inc/Kitzinger ID : 31970  
 Reporting Period From January 1, 2013 to December 31, 2013

Chemical Description	Physical & Health Hazards		Inventory		Storage Codes & Location						
	Fire	Pressure	Max Daily Amt(lbs)	Max Daily Amount Code	Container Type	Pressure	Temperature	Storage Location	Description	Max Amt At Location(lbs)	
Chemical ID : 124606 Chemical Information is changed from Last : <input checked="" type="checkbox"/> Submission : 7705080 CAS : 7705080 Trade Secret : <input type="checkbox"/> Chemical Name : FERRIC CHLORIDE EHS : <input type="checkbox"/> Contains EHS : <input type="checkbox"/> EHS Name : <input type="checkbox"/> <input type="checkbox"/> Pure <input checked="" type="checkbox"/> Mix <input type="checkbox"/> Solid <input checked="" type="checkbox"/> Liquid <input type="checkbox"/> Gas	<input type="checkbox"/>	<input type="checkbox"/>	8000	05	3600	04	365				
<p align="center"><b>Fee and/or Reporting Exemption</b></p> <input type="checkbox"/> Chemical is gasoline or diesel fuel, held for resale or retail. <input type="checkbox"/> Chemical is gasoline and/or diesel fuel was stored in a tank(s) entirely underground. <input type="checkbox"/> Chemical is sand and/or gravel. <input type="checkbox"/> Chemical is calcium chloride, sodium chloride or calcium magnesium acetate used for delcing agent. <input type="checkbox"/> Chemical is reported voluntarily.											

Chemical Description	Physical & Health Hazards		Inventory		Storage Codes & Location																																			
	File	Pressure	Max Daily Amt(lbs)	Max Daily Amount Code	Container Type	Pressure	Temperature	Storage Location	Description	Max Amt At Location(lbs)																														
Chemical ID : 11545 Chemical Information is changed from Last : <input checked="" type="checkbox"/> Submission : 1310732 CAS : 1310732 Trade Secret : <input type="checkbox"/> Chemical Name : SODIUM HYDROXIDE EHS : <input type="checkbox"/> Contains EHS : <input type="checkbox"/> EHS Name : <input type="checkbox"/> <input type="checkbox"/> Pure <input checked="" type="checkbox"/> Mix <input type="checkbox"/> Solid <input checked="" type="checkbox"/> Liquid <input type="checkbox"/> Gas	<input type="checkbox"/>	<input type="checkbox"/>	24000	06	12500	06	365																																	
<table border="1"> <thead> <tr> <th>Container Type</th> <th>Pressure</th> <th>Temperature</th> <th>Storage Location</th> <th>Description</th> <th>Max Amt At Location(lbs)</th> </tr> </thead> <tbody> <tr> <td>01 TOTE BIN</td> <td>11 AMBIENT PRESSURE</td> <td>11 AMBIENT TEMPERATURE</td> <td>NORTHCH PLANT - SW CORNER OF BUILDING</td> <td></td> <td>12000</td> </tr> <tr> <td>02 PLASTIC OR NONMETALLIC DRUM</td> <td>11 AMBIENT PRESSURE</td> <td>11 AMBIENT TEMPERATURE</td> <td>PENNSYLVANI PLANT - SW CORNER OF BUILDING</td> <td></td> <td>12000</td> </tr> <tr> <td>03 TOTE BIN</td> <td>11 AMBIENT PRESSURE</td> <td>11 AMBIENT TEMPERATURE</td> <td>PENNSYLVANI PLANT - SE CORNER OF BUILDING</td> <td></td> <td>12000</td> </tr> <tr> <td>04 PLASTIC OR NONMETALLIC DRUM</td> <td>11 AMBIENT PRESSURE</td> <td>11 AMBIENT TEMPERATURE</td> <td>PENNSYLVANI PLANT - SE CORNER OF BUILDING</td> <td></td> <td>12000</td> </tr> </tbody> </table>											Container Type	Pressure	Temperature	Storage Location	Description	Max Amt At Location(lbs)	01 TOTE BIN	11 AMBIENT PRESSURE	11 AMBIENT TEMPERATURE	NORTHCH PLANT - SW CORNER OF BUILDING		12000	02 PLASTIC OR NONMETALLIC DRUM	11 AMBIENT PRESSURE	11 AMBIENT TEMPERATURE	PENNSYLVANI PLANT - SW CORNER OF BUILDING		12000	03 TOTE BIN	11 AMBIENT PRESSURE	11 AMBIENT TEMPERATURE	PENNSYLVANI PLANT - SE CORNER OF BUILDING		12000	04 PLASTIC OR NONMETALLIC DRUM	11 AMBIENT PRESSURE	11 AMBIENT TEMPERATURE	PENNSYLVANI PLANT - SE CORNER OF BUILDING		12000
Container Type	Pressure	Temperature	Storage Location	Description	Max Amt At Location(lbs)																																			
01 TOTE BIN	11 AMBIENT PRESSURE	11 AMBIENT TEMPERATURE	NORTHCH PLANT - SW CORNER OF BUILDING		12000																																			
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03 TOTE BIN	11 AMBIENT PRESSURE	11 AMBIENT TEMPERATURE	PENNSYLVANI PLANT - SE CORNER OF BUILDING		12000																																			
04 PLASTIC OR NONMETALLIC DRUM	11 AMBIENT PRESSURE	11 AMBIENT TEMPERATURE	PENNSYLVANI PLANT - SE CORNER OF BUILDING		12000																																			

CLCM-EPCRA-ST FRANCIS-Q22(b)-000003

Fee and/or Reporting Exemption

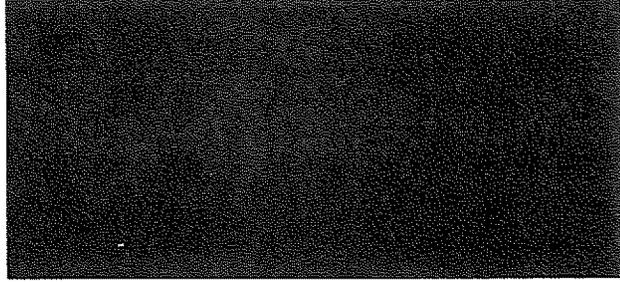
- Chemical is gasoline or diesel fuel, held for resale or retail.
- Chemical is gasoline and/or diesel fuel was stored in a tank(s) entirely underground.
- Chemical is sand and/or gravel.
- Chemical is calcium chloride, sodium chloride or calcium magnesium acetate used for deicing agent.
- Chemical is reported voluntarily.

Chemical ID	Chemical Description	Physical & Health Hazards			Inventory		Storage Codes & Location													
		Fire	Pressure	Reactivity	Max Daily Amt(lbs)	Max Daily Amount Code	Container Type	Pressure	Temperature	Storage Location	Description	Max Amt At Location(lbs)								
108517	Chemical Information is changed from Last Submission CAS : 7664939 Trade Secret : <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3000	04	3000	04	1400	04	365	No of days on site								
	Chemical Name : SULFURIC ACID EHS : <input checked="" type="checkbox"/> EHS Name : SULFURIC ACID Contains EHS : <input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>																
		<input type="checkbox"/> Pure <input checked="" type="checkbox"/> Mix <input type="checkbox"/> Solid <input checked="" type="checkbox"/> Liquid <input type="checkbox"/> Gas																		

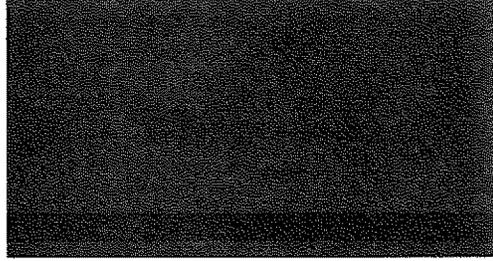
Fee and/or Reporting Exemption

- Chemical is gasoline or diesel fuel, held for resale or retail.
- Chemical is gasoline and/or diesel fuel was stored in a tank(s) entirely underground.
- Chemical is sand and/or gravel.
- Chemical is calcium chloride, sodium chloride or calcium magnesium acetate used for deicing agent.
- Chemical is reported voluntarily.

Notes	
Notes entered by Company/Facility User	Following direct from WEMD (see 01/22/13 email to Dawn Miller), this report for site 31870 covers two adjacent buildings that use to be reported separately (IDs 31970 and 197943). Both buildings' site plans are included (one under "Staplan "" and one under "Site coordinate abbreviations"). Another ID (197565) associated with this facility, although it never existed, was deleted from the WEMD system per the 01/22/13 email to Dawn Miller.



Billing Address



Payment Method

Online Transaction ID 1246

WEM Report Type Tier II

WEM Report Year 2013

WEM Invoice No. 184209

WEM Facility ID 31970

Status PROCESSED

Payment Date 03/03/2014

Total Amount \$498.15

Convenience Fee \$12.15

Payment Amount \$486.00

https://whoops.wisconsin.gov  
EPCRA - Inventory Fee for Chemicals on-site

Description WI DMA

Payment Details

Confirmation Number WISIF5008774537

You must click the "Continue" button below in order to return to the state agency's website. Please keep a record of your Confirmation Number, or print this page for your records.

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# State of Wisconsin



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CLCM-EPCRA-ST FRANCIS-Q22(b)-000007

**WISCONSIN 2015 EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY**  
 PO Box 7978, Madison, WI 53707-7978  
 Phone: 608-242-3221

**WISCONSIN EMERGENCY MANAGEMENT**  
 DMA 1004 (R11-09) Wis. Stat 323.60

Reporting Period From January 1, 2015 to December 31, 2015

Annual  Revision  Facility Information is changed from Last Submission

Facility Identification		Owner/Operator Details	
ID	31870	Name	CONTAINER LIFE CYCLE MANAGEMENT (CLCM)
Name	CLCM St. Francis	Address	3950 SOUTH PENNSYLVANIA AVE.
Street	3950 SOUTH PENNSYLVANIA AVE.	City	SAINT FRANCIS
State	WI	Zip	53235
County	MILWAUKEE COUNTY	Phone	(414) 483-8800
LEPC Name	Milwaukee County LEPC	Parent Company Details	United States
Lat/Long	42.9725858/-87.87969959	Name	
Contact Name	MARK FURGASON	Address	
Fax		Phone	
Maximum Occupants	10	Dun and Brad No	
SIC Code	3412	Facility Emergency Coordinator	
NAICS	332439	Name	MARK FURGASON
		Phone	(414) 483-8800
		Email	mfurgason@masdinc.com
Subject to Emergency Planning under Section 302 of EPCRA (40 CFR part 355)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Subject to Chemical Accident Prevention under Section 112(f) of CAA (40 CFR part 68, Risk Management Program)? RMP Facility ID: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Subject to Toxic Release Inventory under Section 313 of EPCRA (40 CFR part 372)? TRI Facility ID: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No 53207K1ZNG2529E		Tier II Information Contact Name : Amy Litscher Phone : (920) 945-0601 Email : alitscher@saga-ee.com Title : Env. Consultant 24 Hr. Phone : (414) 791-6765	
<b>Mailing Address if different from Facility ID Address</b> Company : CONTAINER LIFE CYCLE MANAGEMENT (CLCM) Atn Street : 3950 SOUTH PENNSYLVANIA AVE. Street Address 2 : Address 1 : SAINT FRANCIS State : WI City : SAINT FRANCIS Phone : (414) 483-8800 ZIP : 53235 Country : United States			
<b>Emergency Contacts</b>			
SLNo	Name	Title	Phone
1	MARK FURGASON	Site Manager	(414) 483-8800
2	ROBERT JANOWSKI	Operations Manager	(414) 483-8800
Certification: I certify under penalty of law that I have personally examined and am familiar with the information submitted, and that based on my inquiry of those individuals responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. Mark Furgason, Site Manager Date: 2/11/2016 1:17 PM Telephone Number: (414) 483-8800 Signature: Mark Furgason		Optional Attachments <input checked="" type="checkbox"/> Site Plan <input type="checkbox"/> Site Coordinate Abbreviations <input type="checkbox"/> Other Safeguard measures	

**WISCONSIN 2015 EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY**

Facility Name : CLCM St. Francis ID : 31970

Reporting Period From January 1, 2015 to December 31, 2015

Reporting Exemption  Exempt  Not Exempt**Reason for Reporting Exemption (See Resources for definitions of Fee/Reporting Exemptions)**

- a. This facility is not covered by the OSHA Hazard Communication Act and is not a private or public agency as defined by s. 323.60 (1)(h) and (i).
- b. Per OSHA Hazard Communication Act regulations, hazardous chemicals present at this facility are not required to have Material Safety Data Sheets prepared for them or available to the facility because of one or more of the eight reporting exemptions at CFR Chapter 29, Section 1910.1200(f). (See Resources link for eight OSHA Reporting Exemptions)
- c. Hazardous chemicals at this facility fall under one or more of the section 311(e) reporting exemptions. (See Resources for five 311(e) Reporting Exemptions)
- d. This is a Retail Gas Station and the higher reporting thresholds for gasoline and diesel fuel apply. (See instructions in the Resources link)

Fee Exemption  Exempt  Not Exempt**Reason for Fee Exemption**

- a. The operator of this facility had fewer than 10 full-time equivalent employees (20,080 hrs.) in the state of Wisconsin in 2015. There were a Total of 80 full-time equivalent employees.
- b. This is a Federal or Federally recognized Tribal facility.

Partial Fee Exemption  Exempt  Not Exempt**Reason for Partial Fee Exemption (See Resources for definitions of Fee/Reporting Exemptions)**

- a. Chemical is gasoline and/or diesel fuel present in reportable quantities and held for resale or retail at a petroleum marketing facility.
- b. Chemical is gasoline and/or diesel fuel at a retail gas station was stored in a tank(s) entirely underground, and 2) the facility was in compliance with all applicable Underground Storage program requirements at all times during the preceding calendar year, and 3) less than 75,000 gallons of gasoline and/or 100,000 gallons of diesel fuel were present any one time.
- c. Chemical is sand and/or gravel present in reportable quantities.
- d. Chemical is calcium chloride, sodium chloride and/or calcium magnesium acetate present in reportable quantities and used as a road deicing agent.
- e. Chemical is reported voluntarily and is not present in reportable quantities or exempt from reporting for Section 311(e) (MSDS/Chemical List), Section 312 (annual Tier Two Reporting), and the OSHA Hazard Communications Act regulations.

### WISCONSIN 2015 EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY

Facility Name : CLCM St. Francis ID : 31970

Reporting Period From January 1, 2015 to December 31, 2015

Chemical Description	Physical & Health Hazards	Inventory	Storage Codes & Location				
Chemical ID : 124606 Chemical Information is changed from Last : <input checked="" type="checkbox"/> Submission : 7705090 CAS : 7705090 Trade Secret : <input type="checkbox"/> Chemical Name : FERRIC CHLORIDE EHS : <input type="checkbox"/> Contains EHS : <input type="checkbox"/> EHS Name : <input type="checkbox"/> MSDS/SDS <input type="checkbox"/> Pure <input checked="" type="checkbox"/> Mix <input type="checkbox"/> Solid <input checked="" type="checkbox"/> Liquid <input type="checkbox"/> Gas	<input type="checkbox"/> Fire <input type="checkbox"/> Pressure <input type="checkbox"/> Reactivity <input checked="" type="checkbox"/> Immediate <input checked="" type="checkbox"/> Delayed (Chronic)	3000 Max Daily Amt(lbs) 04 Max Daily Amount Code 2800 Ave. Daily Amount (lbs.) 04 Ave. Daily Amount Code 365 No of days on site	Container Type : <input type="checkbox"/> STEEL DRUM Pressure : <input type="checkbox"/> AMBIENT PRESSURE Temperature : <input type="checkbox"/> AMBIENT TEMPERATURE Storage Location : <input type="checkbox"/> INSIDE - NEAR WATERTREATMENT TANK Description : Max Amt At Location(lbs) : 3000				

#### Fee and/or Reporting Exemption

Chemical is gasoline or diesel fuel, held for resale or retail.  
 Chemical is gasoline and/or diesel fuel was stored in a tank(s) entirely underground.  
 Chemical is sand and/or gravel.  
 Chemical is calcium chloride, sodium chloride or calcium magnesium acetate used for deliquing agent.  
 Chemical is reported voluntarily.

Chemical Description	Physical & Health Hazards	Inventory	Storage Codes & Location				
Chemical ID : 454244 Chemical Information is changed from Last : <input checked="" type="checkbox"/> Submission : 7647010 CAS : 7647010 Trade Secret : <input type="checkbox"/> Chemical Name : HYDROCHLORIC ACID EHS : <input type="checkbox"/> Contains EHS : <input type="checkbox"/> EHS Name : <input type="checkbox"/> MSDS/SDS <input type="checkbox"/> Pure <input checked="" type="checkbox"/> Mix <input type="checkbox"/> Solid <input checked="" type="checkbox"/> Liquid <input type="checkbox"/> Gas	<input type="checkbox"/> Fire <input type="checkbox"/> Pressure <input type="checkbox"/> Reactivity <input checked="" type="checkbox"/> Immediate <input checked="" type="checkbox"/> Delayed (Chronic)	6000 Max Daily Amt(lbs) 05 Max Daily Amount Code 5900 Ave. Daily Amount (lbs.) 05 Ave. Daily Amount Code 366 No of days on site	Container Type : <input type="checkbox"/> PLASTIC OR NONMETALLIC DRUM Pressure : <input type="checkbox"/> AMBIENT PRESSURE Temperature : <input type="checkbox"/> AMBIENT TEMPERATURE Storage Location : <input type="checkbox"/> INSIDE - NEAR P75 ADDIZER Description : Max Amt At Location(lbs) : 6000				

**Fee and/or Reporting Exemption**

- Chemical is gasoline or diesel fuel, held for resale or retail.
- Chemical is gasoline and/or diesel fuel was stored in a tank(s) entirely underground.
- Chemical is sand and/or gravel.
- Chemical is calcium chloride, sodium chloride or calcium magnesium acetate used for deicing agent.
- Chemical is reported voluntarily.

Chemical Description		Physical & Health Hazards		Inventory		Storage Codes & Location					
Chemical ID	11545	Fire	<input type="checkbox"/>	8000	Max Daily Amt(lbs)	Container Type	Pressure	Temperature	Storage Location	Description	Max Amt At Location(lbs)
Chemical Information is changed from Last Submission	<input checked="" type="checkbox"/>	Pressure	<input type="checkbox"/>	05	Max Daily Amount Code	(0) TOTE BIN	(1) AMBIENT PRESSURE	(4) AMBIENT TEMPERATURE	LOCATION SW CORNER OF BUILDING		0
CAS	1310732	Reactivity	<input type="checkbox"/>	7650	Ave. Daily Amount (lbs.)	(1) PLASTIC OR NONMETALLIC DRUM	(1) AMBIENT PRESSURE	(4) AMBIENT TEMPERATURE	NORTHWICH PLANT - SW CORNER OF BUILDING		0
Trade Secret	<input type="checkbox"/>	Immediate	<input checked="" type="checkbox"/>	05	Ave. Daily Amount Code	(0) TOTE BIN	(1) AMBIENT PRESSURE	(4) AMBIENT TEMPERATURE	RESIDE - NEAR CAUSTIC SCRUBBER		0
Chemical Name	SODIUM HYDROXIDE	Delayed (Chronic)	<input checked="" type="checkbox"/>	365	No of days on site	(0) TOTE BIN	(1) AMBIENT PRESSURE	(4) AMBIENT TEMPERATURE	RESIDE - NEAR CAUSTIC SCRUBBER		0
EHS Name	Contains EHS					(0) TOTE BIN	(1) AMBIENT PRESSURE	(4) AMBIENT TEMPERATURE	RESIDE - NEAR CAUSTIC SCRUBBER		8000
EHS Name	MSDS/SDS					(0) TOTE BIN	(1) AMBIENT PRESSURE	(4) AMBIENT TEMPERATURE	RESIDE - NEAR CAUSTIC SCRUBBER		
Pure	<input type="checkbox"/>					(0) TOTE BIN	(1) AMBIENT PRESSURE	(4) AMBIENT TEMPERATURE	RESIDE - NEAR CAUSTIC SCRUBBER		
Mix	<input checked="" type="checkbox"/>					(0) TOTE BIN	(1) AMBIENT PRESSURE	(4) AMBIENT TEMPERATURE	RESIDE - NEAR CAUSTIC SCRUBBER		
Solid	<input checked="" type="checkbox"/>					(0) TOTE BIN	(1) AMBIENT PRESSURE	(4) AMBIENT TEMPERATURE	RESIDE - NEAR CAUSTIC SCRUBBER		
Liquid	<input type="checkbox"/>					(0) TOTE BIN	(1) AMBIENT PRESSURE	(4) AMBIENT TEMPERATURE	RESIDE - NEAR CAUSTIC SCRUBBER		
Gas	<input type="checkbox"/>					(0) TOTE BIN	(1) AMBIENT PRESSURE	(4) AMBIENT TEMPERATURE	RESIDE - NEAR CAUSTIC SCRUBBER		

**Fee and/or Reporting Exemption**

- Chemical is gasoline or diesel fuel, held for resale or retail.
- Chemical is gasoline and/or diesel fuel was stored in a tank(s) entirely underground.
- Chemical is sand and/or gravel.
- Chemical is calcium chloride, sodium chloride or calcium magnesium acetate used for deicing agent.
- Chemical is reported voluntarily.

Chemical Description		Physical & Health Hazards		Inventory		Storage Codes & Location					
Chemical ID	108517	Fire	<input type="checkbox"/>	4000	Max Daily Amt(lbs)	Container Type	Pressure	Temperature	Storage Location	Description	Max Amt At Location(lbs)
Chemical Information is changed from Last Submission	<input checked="" type="checkbox"/>	Pressure	<input type="checkbox"/>	04	Max Daily Amount Code	(1) PLASTIC OR NONMETALLIC DRUM	(1) AMBIENT PRESSURE	(4) AMBIENT TEMPERATURE	INSIDE THERMOLOGU 1 BUILDING		4000
CAS	7664939	Reactivity	<input checked="" type="checkbox"/>	3875	Ave. Daily Amount (lbs.)	(1) PLASTIC OR NONMETALLIC DRUM	(1) AMBIENT PRESSURE	(4) AMBIENT TEMPERATURE	INSIDE THERMOLOGU 1 BUILDING		
Trade Secret	<input type="checkbox"/>	Immediate	<input checked="" type="checkbox"/>	04	Ave. Daily Amount Code	(1) PLASTIC OR NONMETALLIC DRUM	(1) AMBIENT PRESSURE	(4) AMBIENT TEMPERATURE	INSIDE THERMOLOGU 1 BUILDING		
Chemical Name	SULFURIC ACID	Delayed (Chronic)	<input checked="" type="checkbox"/>	365	No of days on site	(1) PLASTIC OR NONMETALLIC DRUM	(1) AMBIENT PRESSURE	(4) AMBIENT TEMPERATURE	INSIDE THERMOLOGU 1 BUILDING		
EHS Name	Contains EHS					(1) PLASTIC OR NONMETALLIC DRUM	(1) AMBIENT PRESSURE	(4) AMBIENT TEMPERATURE	INSIDE THERMOLOGU 1 BUILDING		
EHS Name	MSDS/SDS					(1) PLASTIC OR NONMETALLIC DRUM	(1) AMBIENT PRESSURE	(4) AMBIENT TEMPERATURE	INSIDE THERMOLOGU 1 BUILDING		
Pure	<input type="checkbox"/>					(1) PLASTIC OR NONMETALLIC DRUM	(1) AMBIENT PRESSURE	(4) AMBIENT TEMPERATURE	INSIDE THERMOLOGU 1 BUILDING		
Mix	<input checked="" type="checkbox"/>					(1) PLASTIC OR NONMETALLIC DRUM	(1) AMBIENT PRESSURE	(4) AMBIENT TEMPERATURE	INSIDE THERMOLOGU 1 BUILDING		
Solid	<input type="checkbox"/>					(1) PLASTIC OR NONMETALLIC DRUM	(1) AMBIENT PRESSURE	(4) AMBIENT TEMPERATURE	INSIDE THERMOLOGU 1 BUILDING		
Liquid	<input checked="" type="checkbox"/>					(1) PLASTIC OR NONMETALLIC DRUM	(1) AMBIENT PRESSURE	(4) AMBIENT TEMPERATURE	INSIDE THERMOLOGU 1 BUILDING		
Gas	<input type="checkbox"/>					(1) PLASTIC OR NONMETALLIC DRUM	(1) AMBIENT PRESSURE	(4) AMBIENT TEMPERATURE	INSIDE THERMOLOGU 1 BUILDING		

**Fee and/or Reporting Exemption**

- Chemical is gasoline or diesel fuel, held for resale or retail.
- Chemical is gasoline and/or diesel fuel was stored in a tank(s) entirely underground.
- Chemical is sand and/or gravel.
- Chemical is calcium chloride, sodium chloride or calcium magnesium acetate used for deicing agent.
- Chemical is reported voluntarily.

**Notes**

Notes entered by Company/Facility User	
	From 2013 through mid 2015, this ID number 31970 covered two adjacent buildings that use to be reported separately (IDs 31970 and 197943). All operations from the Norwich Ave. building have now been moved to the Pennsylvania Ave. building. The owner for the operations is now CLCM.

**WISCONSIN 2016 EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY**

PO Box 7978, Madison, WI 53707-7978  
 Phone: 608-242-3221

WISCONSIN EMERGENCY MANAGEMENT  
 DMA 1004 (R11-09) Wis. Stat 323.60

Reporting Period From January 1, 2016 to December 31, 2016

Annual  Revision  Facility Information is changed from Last Submission

Facility Identification				Owner/Operator Details			
ID	31970	Name	CLCM St. Francis	Name	CONTAINER LIFE CYCLE MANAGEMENT (CLCM)	Address	3950 SOUTH PENNSYLVANIA AVE.
Street	3950 SOUTH PENNSYLVANIA AVE.	City	SAINT FRANCIS	Address	3950 SOUTH PENNSYLVANIA AVE.	State	WI 53235
State	WI	Zip	53235	Address	SAINT FRANCIS, WI 53235	United States	
County	MILWAUKEE COUNTY	Title	<input type="checkbox"/>	Phone	(414) 483-8800	Email	mturgason@masdinc.com
LEPC Name	Milwaukee County LEPC	Fire Department	ST FRANCIS FIRE DEPT	Parent Company Details			
Lat/Long	42.9726856/-87.8798959	Phone	(414) 483-8800	Name	MARK FURGASON	Title	Kitzinger Site Manager
Contact Name	MARK FURGASON	Email	mturgason@masdinc.com	Phone	(920) 945-0601	24 Hr. Phone	(414) 764-2462
Fax		<input checked="" type="checkbox"/> Manned <input type="checkbox"/> Unmanned		Email	mturgason@masdinc.com	24 Hr. Phone	(414) 764-2462
Maximum Occupants	10			Facility Emergency Coordinator			
SIC Code	3412	Dun & Brad No	963884767	Name	MARK FURGASON	Title	Kitzinger Site Manager
NAICS	332439	TRIFID		Phone	(414) 483-8800	24 Hr. Phone	(414) 764-2462
Subject to Emergency Planning under Section 302 of EPCRA (40 CFR part 355)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				Tier II Information Contact			
Subject to Chemical Accident Prevention under Section 112(i) of CAA (40 CFR part 68, Risk Management Program)? RMP Facility ID: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				Name	Amy Litscher	Title	Env. Consultant
Subject to Toxic Release Inventory under Section 313 of EPCRA (40 CFR part 372)? TRI Facility ID: 53207KTZNG2529E <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				Phone	(920) 945-0601	24 Hr. Phone	(414) 791-6765
Mailing Address if different from Facility ID Address				Email	allitscher@saga-es.com		
Company	CONTAINER LIFE CYCLE MANAGEMENT (CLCM) Attn	Street Address 2	MARK FURGASON				
Street	3950 SOUTH PENNSYLVANIA AVE.	State	WI				
Address 1		City	SAINT FRANCIS				
City	SAINT FRANCIS	State	WI				
Zip	53235	Phone	(414) 483-8800				
Country	United States						
Emergency Contacts							
SI.No	Name	Title	Phone	24 Hr. Phone	Email		
1	MARK FURGASON	Site Manager	(414) 483-8800	(414) 764-2462	mturgason@masdinc.com		
2	ROBERT JANOWSKI	Operations Manager	(414) 483-8800	(414) 764-5531	mturgason@masdinc.com		

Certification: I certify under penalty of law that I have personally examined and am familiar with the information submitted, and that based on my inquiry of those individuals responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

Mark Furgason, Site Manager Date: 2/27/2017 8:56 AM

Name and official title of owner/operator or authorized representative Telephone Number: (414) 483-8901

Signature: Mark Furgason Optional Attachments:  Site Plan  Site Coordinate Abbreviations  Other Safeguard measures

**WISCONSIN 2016 EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY**

Facility Name : CLCM St. Francis ID : 31970

Reporting Period From January 1, 2016 to December 31, 2016

Reporting Exemption  Exempt  Not Exempt**Reason for Reporting Exemption (See Resources for definitions of Fee/Reporting Exemptions)**

- a. This facility is not covered by the OSHA Hazard Communication Act and is not a private or public agency as defined by s. 323.60 (1)(h) and (i).
- b. Per OSHA Hazard Communication Act regulations, hazardous chemicals present at this facility are not required to have Material Safety Data Sheets prepared for them or available to the facility because of one or more of the eight reporting exemptions at CFR Chapter 29, Section 1910.1200(b). (See Resources link for eight OSHA Reporting Exemptions)
- c. Hazardous chemicals at this facility fall under one or more of the section 311(e) reporting exemptions. (See Resources for five 311(e) Reporting Exemptions)
- d. This is a Retail Gas Station and the higher reporting thresholds for gasoline and diesel fuel apply. (See instructions in the Resources link)

Fee Exemption  Exempt  Not Exempt**Reason for Fee Exemption**

- a. The operator of this facility had fewer than 10 full-time equivalent employees (20,080 hrs.) in the state of Wisconsin in 2016. There were a Total of 80 full-time equivalent employees.
- b. This is a Federal or federally recognized Tribal facility.

Partial Fee Exemption  Exempt  Not Exempt**Reason for Partial Fee Exemption (See Resources for definitions of Fee/Reporting Exemptions)**

- a. Chemical is gasoline and/or diesel fuel present in reportable quantities and held for resale or retail at a petroleum marketing facility.
- b. Chemical is gasoline and/or diesel fuel at a retail gas station was stored in a tank(s) entirely underground, and 2) the facility was in compliance with all applicable Underground Storage program requirements at all times during the preceding calendar year, and 3) less than 75,000 gallons of gasoline and/or 100,000 gallons of diesel fuel were present any one time.
- c. Chemical is sand and/or gravel present in reportable quantities.
- d. Chemical is calcium chloride, sodium chloride and/or calcium magnesium acetate present in reportable quantities and used as a road deicing agent.
- e. Chemical is reported voluntarily and is not present in reportable quantities or exempt from reporting for Section 311(e) (MSDS/Chemical List), Section 312 (annual Tier Two Reporting), and the OSHA Hazard Communications Act regulations.

**WISCONSIN 2016 EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY**

Facility Name : CLCM St. Francis ID : 31970

Reporting Period From January 1, 2016 to December 31, 2016

Chemical Description		Physical & Health Hazards		Inventory		Storage Codes & Location					
Chemical ID	: 458219	<input checked="" type="checkbox"/> Fire		15000	Max Daily Amt(lbs)	Container Type	Pressure	Temperature	Storage Location	Description	Max Amt At Location(lbs)
Chemical Information is changed from Last Submission	: <input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Pressure		06	Max Daily Amount Code	(D) STEEL DRUM	(1) AMBIENT PRESSURE	(4) AMBIENT TEMPERATURE	NEAR COATING PROCESS LINES AND INCOMING DOORS		15000
CAS	: N/A	<input type="checkbox"/> Reactivity		4500	Ave. Daily Amount (lbs.)						
Trade Secret	: <input type="checkbox"/>	<input checked="" type="checkbox"/> Immediate		04	Ave. Daily Amount Code						
Chemical Name	: <b>COATINGS</b>	<input type="checkbox"/> Delayed (Chronic)		385	No of days on site						
EHS	: <input type="checkbox"/> Contains EHS										
EHS Name	: <input type="checkbox"/>										
<input type="checkbox"/> Pure	<input checked="" type="checkbox"/> Mix	<input type="checkbox"/> Solid	<input checked="" type="checkbox"/> Liquid	<input type="checkbox"/> Gas							

**Fee and/or Reporting Exemption**

Chemical is gasoline or diesel fuel, held for resale or retail.

Chemical is gasoline and/or diesel fuel was stored in a tank(s) entirely underground.

Chemical is sand and/or gravel.

Chemical is calcium chloride, sodium chloride or calcium magnesium acetate used for deicing agent.

Chemical is reported voluntarily.

Chemical Description		Physical & Health Hazards		Inventory		Storage Codes & Location					
Chemical ID	: 124806	<input type="checkbox"/> Fire		3000	Max Daily Amt(lbs)	Container Type	Pressure	Temperature	Storage Location	Description	Max Amt At Location(lbs)
Chemical Information is changed from Last Submission	: <input type="checkbox"/>	<input type="checkbox"/> Pressure		04	Max Daily Amount Code	(D) STEEL DRUM	(1) AMBIENT PRESSURE	(4) AMBIENT TEMPERATURE	INSIDE - NEAR WATER TREATMENT TANK		3000
CAS	: 7705080	<input type="checkbox"/> Reactivity		2500	Ave. Daily Amount (lbs.)						
Trade Secret	: <input type="checkbox"/>	<input checked="" type="checkbox"/> Immediate		04	Ave. Daily Amount Code						
Chemical Name	: <b>FERRIC CHLORIDE</b>	<input type="checkbox"/> Delayed (Chronic)		365	No of days on site						
EHS	: <input type="checkbox"/> Contains EHS										
EHS Name	: <input type="checkbox"/> MSDS/SDS										
<input type="checkbox"/> Pure	<input checked="" type="checkbox"/> Mix	<input type="checkbox"/> Solid	<input checked="" type="checkbox"/> Liquid	<input type="checkbox"/> Gas							

**Fee and/or Reporting Exemption**

- Chemical is gasoline or diesel fuel, held for resale or retail.
- Chemical is gasoline and/or diesel fuel was stored in a tank(s) entirely underground.
- Chemical is sand and/or gravel.
- Chemical is calcium chloride, sodium chloride or calcium magnesium acetate used for deicing agent.
- Chemical is reported voluntarily.

Chemical Description		Physical & Health Hazards		Inventory		Storage Codes & Location								
Chemical ID	: 454244	Fire	<input type="checkbox"/>	6000	Max Daily Amt(lbs)	Container Type	Pressure	Temperature	Storage Location	Description	Max Amt At Location(lbs)			
Chemical Information is changed from Last Submission	<input type="checkbox"/>	Pressure	<input type="checkbox"/>	05	Max Daily Amount Code	1) PLASTIC OR NONMETALLIC DRUM	1) AMBIENT PRESSURE	1) AMBIENT TEMPERATURE	ROCK - NUTS ANDZERS	USED IN PYS	5900			
CAS	: 7647010	Reactivity	<input type="checkbox"/>	5900	Ave. Daily Amount (lbs.)									
Trade Secret	<input type="checkbox"/>	Immediate	<input checked="" type="checkbox"/>	05	Ave. Daily Amount Code									
Chemical Name	: HYDROCHLORIC ACID	Delayed (Chronic)	<input checked="" type="checkbox"/>	366	No of days on site									
EHS	: Contains EHS													
EHS Name	: MSDS/SDS													
Pure <input type="checkbox"/>	Mix <input checked="" type="checkbox"/>	Solid <input type="checkbox"/>	Liquid <input checked="" type="checkbox"/>	Gas <input type="checkbox"/>										

**Fee and/or Reporting Exemption**

- Chemical is gasoline or diesel fuel, held for resale or retail.
- Chemical is gasoline and/or diesel fuel was stored in a tank(s) entirely underground.
- Chemical is sand and/or gravel.
- Chemical is calcium chloride, sodium chloride or calcium magnesium acetate used for deicing agent.
- Chemical is reported voluntarily.

Chemical Description		Physical & Health Hazards		Inventory		Storage Codes & Location								
Chemical ID	: 11545	Fire	<input type="checkbox"/>	16000	Max Daily Amt(lbs)	Container Type	Pressure	Temperature	Storage Location	Description	Max Amt At Location(lbs)			
Chemical Information is changed from Last Submission	<input type="checkbox"/>	Pressure	<input type="checkbox"/>	06	Max Daily Amount Code	1) TOTE BIN	1) AMBIENT PRESSURE	1) AMBIENT TEMPERATURE	NORWICH PLANT - SW CORNER OF BUILDING		0			
CAS	: 1310732	Reactivity	<input type="checkbox"/>	7850	Ave. Daily Amount (lbs.)									
Trade Secret	<input type="checkbox"/>	Immediate	<input checked="" type="checkbox"/>	05	Ave. Daily Amount Code									
Chemical Name	: SODIUM HYDROXIDE	Delayed (Chronic)	<input checked="" type="checkbox"/>	365	No of days on site									
EHS	: Contains EHS													
EHS Name	: MSDS/SDS													
Pure <input type="checkbox"/>	Mix <input checked="" type="checkbox"/>	Solid <input type="checkbox"/>	Liquid <input checked="" type="checkbox"/>	Gas <input type="checkbox"/>										

**Fee and/or Reporting Exemption**

- Chemical is gasoline or diesel fuel, held for resale or retail.
- Chemical is gasoline and/or diesel fuel was stored in a tank(s) entirely underground.
- Chemical is sand and/or gravel.
- Chemical is calcium chloride, sodium chloride or calcium magnesium acetate used for deicing agent.
- Chemical is reported voluntarily.

Chemical Description	Physical & Health Hazards	Inventory	Storage Codes & Location			
Chemical ID : 108517 Chemical Information is changed from Last : <input type="checkbox"/> Submission : <input type="checkbox"/> CAS : 7664939 Trade Secret : <input type="checkbox"/> Chemical Name : SULFURIC ACID Contains EHS : <input type="checkbox"/> EHS Name : SULFURIC ACID <input type="checkbox"/> Pure <input checked="" type="checkbox"/> Mix <input type="checkbox"/> Solid <input checked="" type="checkbox"/> Liquid <input type="checkbox"/> Gas MSDS/SDS : <input type="checkbox"/>	<input type="checkbox"/> Fire <input type="checkbox"/> Pressure <input checked="" type="checkbox"/> Reactivity <input checked="" type="checkbox"/> Immediate <input checked="" type="checkbox"/> Delayed (Chronic)	4000 Max Daily Amt(lbs) 04 Max Daily Amount Code 3675 Ave. Daily Amount (lbs.) 04 Ave. Daily Amount Code 365 No of days on site	Container Type : <input type="checkbox"/> METALLIC OR NONMETALLIC DRUM <input type="checkbox"/> PLASTIC OR FIBRE	<input type="checkbox"/> AMBIENT PRESSURE <input type="checkbox"/> AMBIENT TEMPERATURE	<input type="checkbox"/> INSIDE TROUGH OR BUILDING	Description : Location : 4000

**Fee and/or Reporting Exemption**

- Chemical is gasoline or diesel fuel, held for resale or retail.
- Chemical is gasoline and/or diesel fuel was stored in a tank(s) entirely underground.
- Chemical is sand and/or gravel.
- Chemical is calcium chloride, sodium chloride or calcium magnesium acetate used for deicing agent.
- Chemical is reported voluntarily.

**Notes**

Notes entered by Company/Facility User

From 2013 through mid 2015, this ID number 31970 covered two adjacent buildings that use to be reported separately (IDs 31970 and 197943). All operations from the Norwich Ave. building have now been moved to the Pennsylvania Ave. building. The owner for the operations is now CLCM.

## SAFETY DATA SHEET

CAUSTIC SODA LIQUID 50%  
 Product ID: AL005001  
 Revised: 06-25-2014  
 Replaces: 06-24-2014

### 1. IDENTIFICATION

**Product Name:** CAUSTIC SODA LIQUID 50%  
**Synonyms:** Lye; Sodium Hydroxide Solution; Alkali; Caustic; Sodium Hydrate  
**CAS Number:** MIXTURE  
**Recommended Use:** No data available.  
**Restrictions on Use:** No data available.

Hydrite Chemical Co.  
 300 N. Patrick Blvd.  
 Brookfield, WI 53008-0948  
 (262) 792-1450

**EMERGENCY RESPONSE NUMBERS:**  
 24 Hour Emergency #: (414) 277-1311  
 CHEMTREC Emergency #: (800) 424-9300

### 2. HAZARD(S) IDENTIFICATION



**Signal Word:** Danger

**GHS Classification:** Substance or mixture corrosive to metals Category 1  
 Skin Corrosion/Irritation Category 1B  
 Serious Eye Damage/Eye Irritation Category 1  
 Specific Target Organ Systemic Toxicity (STOT) - Single Exposure Category 1

**Hazard Statements:** May be corrosive to metals.  
 Causes severe skin burns and eye damage.  
 Causes damage to organs (respiratory system by inhalation).

**Precautionary Statements:**

**Prevention:** Keep only in original container.  
 Do not breathe dust, fume, gas, mist, vapors or spray.  
 Wash thoroughly after handling.  
 Do not eat, drink or smoke when using this product.  
 Wear gloves, eye and face protection and protective clothing.

**Response:** IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 Immediately call a POISON CENTER or doctor/physician.  
 Specific treatment (see First Aid on SDS or on this label).  
 Wash contaminated clothing before reuse.  
 Absorb spillage to prevent material damage.

**Storage:** Store in a secure manner.  
 Store in corrosive resistant container with a resistant inner liner.

**CAUSTIC SODA LIQUID 50%**  
**Product ID: AL005001**

**Disposal:** Dispose of in accordance with local, regional and international regulations.

**Hazards Not Otherwise Classified:** Reacts with most metals to form explosive/flammable hydrogen gas. May react violently with water. May react with various food sugars to form carbon monoxide.

**Percentage of Components with Unknown Acute Toxicity:**

**Oral:** 50.0 %  
**Inhalation Vapor:** 50.0 %  
**Inhalation Dust/Mist:** 50.0 %

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

<b>Component</b>	<b>CAS Number</b>	<b>% by Wt.</b>
Sodium Hydroxide	1310-73-2	50 %
Water	7732-18-5	50 %

**4. FIRST-AID MEASURES**

**Eye Contact:** If in eyes: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Tilt head to avoid contaminating unaffected eye. Get immediate medical attention. Washing eyes within several seconds is essential to achieve maximum effectiveness. Do not attempt to neutralize with chemical agents. Oils or ointments should not be used at this time. Remove contact lenses after the first 5 minutes and continue flushing.

**Skin Contact:** If on skin: Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Do not reuse clothing and shoes until cleaned. If skin feels slippery, caustic may still be present in sufficient quantities to cause rash or burn. Continue washing skin until slick feeling is gone. Do not apply oils or ointments unless ordered by the physician. Discard footwear which cannot be decontaminated. Discard contaminated leather articles such as shoes and belt.

**Inhalation:** If inhaled: Remove to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration, preferably mouth-to-mouth. **GET MEDICAL ATTENTION IMMEDIATELY.** Symptoms of pulmonary edema can be delayed up to 48 hours after exposure.

**Ingestion:** If swallowed: If fully conscious, drink a quart of water. **DO NOT** induce vomiting. **CALL A PHYSICIAN IMMEDIATELY.** If unconscious or in convulsions, take immediately to a hospital or a physician. **NEVER** induce vomiting or give anything by mouth to an unconscious victim. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs. If vomiting occurs spontaneously, keep airway clear and give more water.

**Note to Physicians:**

The absence of visible signs or symptoms of burns does not reliably exclude the presence of actual tissue damage. Probable mucosal damage may contraindicate the use of gastric lavage. There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient.

**Most Important Symptoms/Effects:**

**Eye Contact:** CORROSIVE-Causes severe irritation and burns. Small amounts may cause: blistering, disintegration, scarring, clouding, ulcerations, permanent eye damage, blindness, corneal damage. Mist may cause: irritation. High mist concentrations may cause: tissue destruction. Glaucoma and cataracts are possible late developments. Effects may vary depending on length of exposure, solution concentration and first aid measures.

**Skin Contact:** CORROSIVE-Causes severe irritation and burns. Corrosive action causes burns and frequently deep ulceration with ultimate scarring. Note that irritation may follow an initial latency. The latency may vary as much as hours for dilute solutions to minutes for more concentrated solutions. Prolonged contact, even with dilute concentrations, can cause tissue destruction and permanent skin damage. Repeated exposure may cause: dermatitis (inflammation of the skin).

**CAUSTIC SODA LIQUID 50%**  
**Product ID: AL005001**

**Skin Absorption:** No absorption hazard expected under normal use.

**Inhalation:** CORROSIVE-Causes severe irritation and burns. Dusts or mists may irritate: nose, mouth, throat, respiratory tract. Dusts or mists may cause damage to the: upper respiratory tract, lungs. May cause: coughing, sneezing, running nose, sore throat, shortness of breath, wheezing, tightness of the chest, chest pain, choking, impaired lung function, pneumonitis, pulmonary edema. Effects may be delayed.

**Ingestion:** CORROSIVE-Causes severe irritation and burns. May cause damage to the: mouth, throat, stomach, esophagus, gastrointestinal tract. Ingestion can cause severe burns and complete tissue perforation of the mucous membranes of the mouth, throat and stomach. May be fatal if swallowed. May cause: abdominal pain, nausea, vomiting, diarrhea, bleeding, fall in blood pressure, shock, collapse, gastrointestinal ulceration. Damage may appear days after exposure. Aspiration into the lungs may occur during ingestion or vomiting resulting in mild to severe pulmonary injury and possibly death.

## 5. FIRE-FIGHTING MEASURES

**Extinguishing Media:** Not combustible. For fires in area use appropriate media. For example: Water spray, Dry chemical, Carbon dioxide, Foam, Halon.

**Fire Fighting Methods:** Evacuate area of unprotected personnel. Wear protective clothing including NIOSH-Approved self-contained breathing apparatus. Remain upwind of fire to avoid hazardous vapors and decomposition products. Use water spray to cool fire-exposed containers, but avoid getting water into containers. Product generates heat upon addition of water, with possible spattering. Run-off from fire control may cause pollution.

**Fire and Explosion Hazards:** Product may react with some metals (ex.: Aluminum, Zinc, Tin, etc.) to release flammable hydrogen gas.

**Hazardous Combustion Products:** Carbon dioxide, Carbon monoxide, Sodium oxides, Irritating and/or toxic gases.

## 6. ACCIDENTAL RELEASE MEASURES

**Spill Clean-Up Procedures:** CORROSIVE MATERIAL. Evacuate unprotected personnel from area. Maintain adequate ventilation. Follow personal protective equipment recommendations found in Section 8. Never exceed any occupational exposure limit. Contain spill, place into drums for proper disposal. Neutralize remaining residue with dilute Hydrochloric Acid solution and dispose of properly. Flush remaining area with water to remove trace residue and dispose of properly. Avoid direct discharge to sewers and surface waters. Notify authorities if entry occurs. CAUTION: This product may react violently with acids and water.

## 7. HANDLING AND STORAGE

**Handling:** Avoid contact with eyes, skin, and clothing. Use with adequate ventilation. Do not swallow. Avoid breathing vapors, mists, or dust. Do not eat, drink, or smoke in work area. Wash thoroughly after handling. CORROSIVE MATERIAL. Avoid dust or mist formation. Add product very slowly while stirring constantly. If product is added too rapidly or without stirring and becomes concentrated at the bottom of the mixing vessel, excessive heat may be generated resulting in dangerous boiling and spattering and possible immediate violent eruption of highly caustic solution.

**Storage:** CORROSIVE MATERIAL. Store in a cool, well ventilated area, out of direct sunlight. Store in a dry location away from heat. Keep away from incompatible materials. Keep containers tightly closed. Do not store in unlabeled or mislabeled containers. Highly corrosive to most metals with evolution of hydrogen gas. Do not freeze. Do not expose sealed containers to temperatures above 104 Deg. F. Deadly carbon monoxide gas can form in enclosed or poorly ventilated areas or tanks when alkaline products contact food, beverage, or dairy products. Do not enter such areas until they have been well ventilated and carbon monoxide and oxygen levels have been determined to be within OSHA acceptable limits. If carbon monoxide and oxygen levels cannot be measured, wear NIOSH-approved, self-contained breathing apparatus. See Section 10 for incompatible materials.

CAUSTIC SODA LIQUID 50%  
Product ID: AL005001

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### OSHA Exposure Guidelines:

Component	Limits
Sodium Hydroxide	2 mg/m3 TWA

### ACGIH Exposure Guidelines:

Component	Limits
Sodium Hydroxide	2 mg/m3 Ceiling

**Engineering Controls:** General room ventilation is required. To keep exposure below established limits, local exhaust may be necessary. Avoid creating dust or mist. Maintain adequate ventilation. Do not use in closed or confined spaces. Keep levels below exposure limits. To determine exposure levels, monitoring should be performed regularly. NOTE: Where carbon monoxide may be generated, special ventilation may be required.

**Eye/Face Protection:** Wear chemical safety goggles and a full face shield while handling this product. Do not wear contact lenses.

**Skin Protection:** Prevent contact with this product. Wear gloves and protective clothing depending on condition of use. Protective gloves: Natural rubber. Butyl rubber. Neoprene. Nitrile. Polyvinyl chloride. Polyethylene.

**Respiratory Protection:** Respiratory protection may be required to avoid overexposure when handling this product. If exposure limits are exceeded, wear: NIOSH-Approved respirator for dusts and mists. NIOSH-Approved Supplied Air Respirator (SAR). NIOSH-Approved self-contained breathing apparatus. DO NOT exceed limits established by the respirator manufacturer. All respiratory protection programs must comply with OSHA 29 CFR 1910.134 and ANSI Z88.2 requirements and must be followed whenever workplace conditions require a respirator's use.

**Other Protective Equipment:** Eye-wash station. Safety shower. Rubber apron. Rubber boots. Protective clothing.

**General Hygiene Conditions:** Wash with soap and water before meal times and at the end of each work shift.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical State:** Liquid.

**Color:** Clear to slightly turbid. Colorless to slightly colored.

**Odor:** No odor.

**Odor Threshold:** N.D.

**pH:** 14.00

**Freezing Point (deg. F):** < 60

**Melting Point (deg. F):** ~50-58

**Initial Boiling Point or Boiling Range:** ~ 284 - 293 °F

**Flash Point:** N.A.

**Flash Point Method:** N.A.

**Evaporation Rate (nBuAc = 1):** N.D.

**Flammability (solid, gas):** N.D.

**Lower Explosion Limit:** N.A.

**Upper Explosion Limit:** N.A.

**Vapor Pressure (mm Hg):** ~1-1.5 @ 20C

**Vapor Density (air=1):** N.D.

**Specific Gravity or Relative Density:** 1.528 @ 25C

**Solubility in Water:** Complete

**Partition Coefficient (n-octanol/water):** N.D.

**Autoignition Temperature:** No Data

**Decomposition Temperature:** N.D.

**Viscosity:** N.D.

**% Volatile (wt%):** N.D.

**VOC (wt%):** 0

CAUSTIC SODA LIQUID 50%  
Product ID: AL005001

VOC (lbs/gal): 0  
Fire Point: N.D.

## 10. STABILITY AND REACTIVITY

**Reactivity:** No data available.

**Chemical Stability:** Stable under normal conditions.

**Possibility of Hazardous Reactions:** Hazardous polymerization will not occur under normal conditions. Sodium hydroxide can induce hazardous polymerization of acetaldehyde, acrolein, and acrylonitrile. Contact with water may cause violent reaction with evolution of heat. To dilute: Add product slowly to lukewarm water; not water to product. Contact with acid or incompatible materials may cause a violent reaction with evolution of heat. May react with certain metals to produce flammable hydrogen gas. Contact with acids, halogenated organics, organic nitro compounds, glycols, or sodium tetrahydroborate may produce flammable hydrogen gas. Contact with 1,2-dichloroethylene, trichloroethylene, tetrachloroethane, or phosphorous can form spontaneously flammable chemicals. Reactions with various food sugars may form carbon monoxide.

**Conditions to Avoid:** Avoid moisture. Avoid extreme temperatures. Keep away from incompatibles.

**Incompatible Materials:** Acids. Metals such as aluminum, zinc, tin, etc. Magnesium. Chromium. Brass. Bronze. Copper. Lead. Other alkali sensitive metals or alloys. Organic materials. Organic nitro compounds. Chlorinated hydrocarbons. Fluorinated hydrocarbons. Acetaldehyde. Chlorine trifluoride. Hydroquinone. Maleic anhydride. Tetrahydrofuran. Acrolein. Phosphorous. Trichloroethylene. Leather. Wool. Phosphorous pentoxide. Halogenated compounds. Glycols. Explosives. Acrylonitrile. 1,2-Dichloroethylene. Tetrachloroethane. Organic peroxides. Sodium tetrahydroborate. Food sugars. Silver nitrate. Ammonia. Chloroform. Methanol. Zirconium.

**Hazardous Decomposition Products:** Hydrogen gas. Carbon monoxide. Flammable dichloroacetylene. Phosphine. Thermal decomposition may release: Sodium oxide.

## 11. TOXICOLOGICAL INFORMATION

<u>Component</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Inhalation LC50</u>
Sodium Hydroxide	No Data	Rabbit: 1350 mg/kg	No Data

### Acute Toxicity Estimate (ATE):

**Dermal:** 2,700 mg/kg

**Routes of Exposure:** Eyes. Skin. Inhalation. Ingestion.

**Eye Contact:** CORROSIVE-Causes severe irritation and burns. Small amounts may cause: blistering, disintegration, scarring, clouding, ulcerations, permanent eye damage, blindness, corneal damage. Mist may cause: irritation. High mist concentrations may cause: tissue destruction. Glaucoma and cataracts are possible late developments. Effects may vary depending on length of exposure, solution concentration and first aid measures.

**Skin Contact:** CORROSIVE-Causes severe irritation and burns. Corrosive action causes burns and frequently deep ulceration with ultimate scarring. Note that irritation may follow an initial latency. The latency may vary as much as hours for dilute solutions to minutes for more concentrated solutions. Prolonged contact, even with dilute concentrations, can cause tissue destruction and permanent skin damage. Repeated exposure may cause: dermatitis (inflammation of the skin).

**Skin Absorption:** No absorption hazard expected under normal use.

**Inhalation:** CORROSIVE-Causes severe irritation and burns. Dusts or mists may irritate: nose, mouth, throat, respiratory tract. Dusts or mists may cause damage to the: upper respiratory tract, lungs. May cause: coughing, sneezing, running nose, sore throat, shortness of breath, wheezing, tightness of the chest, chest pain, choking, impaired lung function, pneumonitis, pulmonary edema. Effects may be delayed.

**Ingestion:** CORROSIVE-Causes severe irritation and burns. May cause damage to the: mouth, throat, stomach, esophagus, gastrointestinal tract. Ingestion can cause severe burns and complete tissue perforation of the mucous membranes of the mouth, throat and stomach. May be fatal if swallowed. May cause: abdominal pain.

**CAUSTIC SODA LIQUID 50%**

Product ID: AL005001

nausea, vomiting, diarrhea, bleeding, fall in blood pressure, shock, collapse, gastrointestinal ulceration. Damage may appear days after exposure. Aspiration into the lungs may occur during ingestion or vomiting resulting in mild to severe pulmonary injury and possibly death.

**Medical Conditions Aggravated by Exposure to Product:** Skin disorders. Lung disorders. Cardiovascular disorders. Eye disorders. Respiratory system disorders.

Other: None known.

**Cancer Information:**

This product does not contain 0.1% or more of the known or potential carcinogens listed in NTP, IARC, or OSHA.

**12. ECOLOGICAL INFORMATION**

Ecotoxicological Information: Extensive data, call for information.

Chemical Fate Information: Extensive data, call for information.

**13. DISPOSAL CONSIDERATIONS**

Hazardous Waste Number: D002

**Disposal Method:** Dispose of in a permitted hazardous waste management facility following all local, state and federal regulations. If approved, neutralize material and flush to sewer. DO NOT pressurize, cut, weld, solder, drill, grind or expose empty containers to heat, flame, sparks or other sources of ignition.

**14. TRANSPORT INFORMATION**

DOT (Department of Transportation):

Identification Number: UN1824  
 Proper Shipping Name: Sodium Hydroxide Solution  
 Hazard Class: 8  
 Packing Group: II  
 Label Required: CORROSIVE  
 Reportable Quantity (RQ): 1000# (Sodium Hydroxide).

**15. REGULATORY INFORMATION**

**TSCA Inventory Status:** This product or all components of this product are listed on the EPA/TSCA Inventory of Chemical Substances.

**SARA Title III Section 311/312 Category Hazards:**

	<u>Immediate (Acute)</u>	<u>Delayed (Chronic)</u>	<u>Fire Hazard</u>	<u>Pressure Release</u>			<u>Reactive</u>		
	Yes	No	No	No	No	No	Yes		
<b>Regulated Components:</b>									
<b>Component</b>			<b>CAS</b>	<b>CERCLA</b>	<b>SARA</b>	<b>SARA</b>	<b>U.S.</b>	<b>WI</b>	<b>Prop</b>
			<b>Number</b>	<b>RQ</b>	<b>EHS</b>	<b>313</b>	<b>HAP</b>	<b>HAP</b>	<b>65</b>
Sodium Hydroxide			1310-73-2	Yes	No	No	No	Yes	No

**\*Prop 65 - May Contain the Following Trace Components:**

Chromium  
 Nickel  
 Arsenic  
 Mercury  
 Lead

**16. OTHER INFORMATION**

**CAUSTIC SODA LIQUID 50%**Product ID: AL005001

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**Hazard Rating System**

Health: 3  
Flammability: 0  
Reactivity: 1  
\* = Chronic Health Hazard

**NFPA Rating System**

Health: 3  
Flammability: 0  
Reactivity: 1  
Special Hazard: None

**MSDS Abbreviations**

N.A. = Not Applicable  
N.D. = Not Determined  
HAP = Hazardous Air Pollutant  
VOC = Volatile Organic Compound  
C = Ceiling Limit  
N.E./Not Estab. = Not Established

MSDS Prepared by: NAO

Reason for Revision: Changes made throughout the SDS. New format.

Revised: 06-25-2014

Replaces: 06-24-2014

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The data in this Safety Data Sheet relates to the specific material designated and does not relate to its use in combination with any other material or process. The data contained is believed to be correct. However, since conditions of use are outside our control it should not be taken as warranty or representation for which HYDRITE CHEMICAL CO. assumes legal responsibility. This information is provided solely for your consideration, investigation, and verification.

## SAFETY DATA SHEET

FERRIC CHLORIDE SOL'N TECH GRADE

Product ID: MI060001

Revised: 02-10-2014

Replaces: 08-04-2011

### 1. IDENTIFICATION

**Product Name:** FERRIC CHLORIDE SOL'N TECH GRADE  
**Synonyms:** Iron (III) Chloride Solution  
**CAS Number:** MIXTURE  
**Recommended Use:** Flocculant, water and waste water treatment and odor removal. Adhesive for dye, textile impression pigment ink and photoengraving.  
**Restrictions on Use:** No data available.

Hydrite Chemical Co.  
 300 N. Patrick Blvd.  
 Brookfield, WI 53008-0948  
 (262) 792-1450

**EMERGENCY RESPONSE NUMBERS:**  
 24 Hour Emergency #: (414) 277-1311  
 CHEMTREC Emergency #: (800) 424-9300

### 2. HAZARD(S) IDENTIFICATION



**Signal Word:** Danger

**GHS Classification:** Substance or mixture corrosive to metals Category 1  
 Skin Corrosion/Irritation Category 1A  
 Serious Eye Damage/Eye Irritation Category 1  
 Respiratory Sensitisation Category 1  
 Specific Target Organ Systemic Toxicity (STOT) - Single Exposure Category 2  
 Specific Target Organ Systemic Toxicity (STOT) - Repeated Exposure Category 2  
 Acute Toxicity - Oral Category 4

**Hazard Statements:** May be corrosive to metals.  
 Harmful if swallowed.  
 Causes severe skin burns and eye damage.  
 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
 May cause damage to organs.  
 May cause damage to organs through prolonged or repeated exposure.

**Precautionary Statements:**

**Prevention:** Keep only in original container.  
 Do not breathe dust, fume, gas, mist, vapors or spray.  
 Wash thoroughly after handling.  
 Do not eat, drink or smoke when using this product.  
 Wear gloves, eye and face protection and protective clothing.  
 In case of inadequate ventilation wear respiratory protection.

**Response:** IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.  
 IF INHALED: Remove victim to fresh air and keep at rest in a position

**FERRIC CHLORIDE SOL'N TECH GRADE**

Product ID: MI060001

comfortable for breathing.  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 Immediately call a POISON CENTER or doctor/physician.  
 Specific treatment (see First Aid on SDS or on this label).  
 If experiencing respiratory symptoms: Call a POISON CENTER or doctor.  
 Wash contaminated clothing before reuse.  
 Absorb spillage to prevent material damage.

**Storage:** Store in a secure manner.  
 Store in corrosive resistant container with a resistant inner liner.

**Disposal:** Dispose of in accordance with local, regional and international regulations.

**Hazards Not Otherwise Classified:** None known.

**Percentage of Components with Unknown Acute Toxicity:**

**Dermal:** 45.0 %  
**Inhalation Vapor:** 45.0 %  
**Inhalation Dust/Mist:** 45.0 %

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

<b>Component</b>	<b>CAS Number</b>	<b>% by Wt.</b>
Water	7732-18-5	55 - 63 %
Ferric Chloride	7705-08-0	37 - 45 %
Hydrogen Chloride	7647-01-0	<= 1.0 %

**4. FIRST-AID MEASURES**

**Eye Contact:** If in eyes: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Tilt head to avoid contaminating unaffected eye. Get immediate medical attention. Do not attempt to neutralize with chemical agents.

**Skin Contact:** If on skin: Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Wash with soap and water. Do not apply oils or ointments unless ordered by the physician.

**Inhalation:** If inhaled: Remove to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration, preferably mouth-to-mouth. GET MEDICAL ATTENTION IMMEDIATELY.

**Ingestion:** If swallowed: If fully conscious, drink a quart of water. DO NOT induce vomiting. CALL A PHYSICIAN IMMEDIATELY. If unconscious or in convulsions, take immediately to a hospital or a physician. NEVER induce vomiting or give anything by mouth to an unconscious victim. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs.

**Note to Physicians:**

Effects of exposure (inhalation, ingestion, or skin contact) may be delayed.

**Most Important Symptoms/Effects:**

**Eye Contact:** CORROSIVE-Causes severe irritation and burns. May cause: tearing, tissue discoloration, blurred vision, severe eye damage, blindness.

**Skin Contact:** CORROSIVE-Causes severe irritation and burns. Mists may cause: severe irritation, burns. Symptoms may include: drying, discomfort, severe burns, tissue damage. Prolonged or repeated exposure with dilute solutions may cause: dermatitis (inflammation of the skin). Contact may cause: permanent skin damage, ulceration, discoloration.

**Skin Absorption:** No absorption hazard expected under normal use.

**FERRIC CHLORIDE SOL'N TECH GRADE**

Product ID: MI060001

**Inhalation:** CORROSIVE-Causes severe irritation and burns. Vapors or mists may irritate or burn: nose, throat, respiratory tract. Symptoms may include: burning sensation, coughing, shortness of breath, lung inflammation, pulmonary edema, choking, difficulty breathing, headache, rapid heart beat. Prolonged or severe overexposure may cause: tissue destruction, death. Effects may be delayed.

**Ingestion:** CORROSIVE-Causes severe irritation and burns. May irritate or burn: mouth, throat, digestive tract. Symptoms may include: nausea, vomiting, abdominal pain, diarrhea, coma, death. Effects may be delayed. May cause: abnormal kidney function, abnormal liver function. Aspiration can result in severe lung damage or death.

**5. FIRE-FIGHTING MEASURES**

**Extinguishing Media:** Not combustible. For fires in area use appropriate media. For example: Water spray, Water fog, Carbon dioxide, Dry chemical, Foam.

**Fire Fighting Methods:** Evacuate area of unprotected personnel. Wear protective clothing including NIOSH-approved self-contained breathing apparatus. Remain upwind of fire to avoid hazardous vapors and decomposition products. Use water spray to cool fire-exposed containers and disperse vapors. Move containers from fire area if possible without hazard. Run-off from fire control may cause pollution.

**Fire and Explosion Hazards:** Product may react with some metals (ex.: Aluminum, Zinc, Tin, etc.) to release flammable hydrogen gas. Heat can cause evolution of gaseous Hydrogen Chloride. Container may rupture from gas generation in a fire situation.

**Hazardous Combustion Products:** Thermal decomposition may release: Hydrogen Chloride gas, Phosgene gas, Hydrogen gas.

**6. ACCIDENTAL RELEASE MEASURES**

**Spill Clean-Up Procedures:** CORROSIVE MATERIAL. Evacuate unprotected personnel from area. Maintain adequate ventilation. Follow personal protective equipment recommendations found in Section 8. Never exceed any occupational exposure limit. Shut off source of leak if safe to do so. Contain spill, place into drums for proper disposal. Flush remaining area with water and neutralize with Soda Ash, Lime or Limestone and dispose of properly. Adequate ventilation is required if soda ash is used, because of the consequent release of carbon dioxide gas. Avoid direct discharge to sewers and surface waters. Notify authorities if entry occurs.

**7. HANDLING AND STORAGE**

**Handling:** Avoid contact with eyes, skin, and clothing. Use with adequate ventilation. Do not swallow. Avoid breathing vapors, mists, or dust. Do not eat, drink, or smoke in work area. Wash thoroughly after handling. Ferric chloride will permanently stain clothing and temporarily stain skin.

**Storage:** CORROSIVE MATERIAL. Store in a cool, well ventilated area, out of direct sunlight. Store in a dry location away from heat. Keep away from incompatible materials. Keep containers tightly closed. Do not store in unlabeled or mislabeled containers. Highly corrosive to most metals with evolution of hydrogen gas. Do not freeze. Protect containers against physical damage. See Section 10 for incompatible materials.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****OSHA Exposure Guidelines:**

<u>Component</u>	<u>Limits</u>
Hydrogen Chloride	5 ppm Ceiling; 7 mg/m <sup>3</sup> Ceiling

**ACGIH Exposure Guidelines:**

<u>Component</u>	<u>Limits</u>
Ferric Chloride	1 mg/m <sup>3</sup> TWA (as Fe)
Hydrogen Chloride	2 ppm Ceiling

**Engineering Controls:** General room ventilation is required. Local exhaust ventilation, process enclosures or other engineering controls may be needed to maintain airborne levels below recommended exposure limits.

**FERRIC CHLORIDE SOL'N TECH GRADE**

Product ID: MI060001

Avoid creating dust or mist. Maintain adequate ventilation. Do not use in closed or confined spaces. Keep levels below exposure limits. To determine exposure levels, monitoring should be performed regularly.

**Eye/Face Protection:** Wear chemical safety goggles and a full face shield while handling this product. Do not wear contact lenses.

**Skin Protection:** Prevent contact with this product. Wear gloves and protective clothing depending on condition of use. Protective gloves: Impervious. Neoprene. Acid-proof. Gauntlet-type.

**Respiratory Protection:** Respiratory protection must be worn if ventilation does not eliminate symptoms or keep levels below recommended exposure limits. If exposure limits are exceeded, wear: NIOSH approved full facepiece respirator with: Acid gas cartridge. HEPA filter. NIOSH-Approved Supplied Air Respirator (SAR). NIOSH-Approved self-contained breathing apparatus. DO NOT exceed limits established by the respirator manufacturer. All respiratory protection programs must comply with OSHA 29 CFR 1910.134 and ANSI Z88.2 requirements and must be followed whenever workplace conditions require a respirator's use.

**Other Protective Equipment:** Eye-wash station. Safety shower. Rubber apron. Rubber boots. Protective clothing. Full-rubber acid suit.

**General Hygiene Conditions:** Wash with soap and water before meal times and at the end of each work shift.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical State:** Liquid.

**Color:** Reddish brown.

**Odor:** Slightly pungent.

**Odor Threshold:** N.D.

**pH:** < 2.00 (as is)

**Freezing Point (deg. F):** N.D.

**Melting Point (deg. F):** N.D.

**Initial Boiling Point or Boiling Range:** 220 - 230 °F

**Flash Point:** N.A.

**Flash Point Method:** N.A.

**Evaporation Rate (nBuAc = 1):** N.A.

**Flammability (solid, gas):** N.D.

**Lower Explosion Limit:** N.A.

**Upper Explosion Limit:** N.A.

**Vapor Pressure (mm Hg):** Negligible

**Vapor Density (air=1):** N.A.

**Specific Gravity or Relative Density:** ~ 1.40 @ 25C

**Solubility in Water:** Complete

**Partition Coefficient (n-octanol/water):** N.D.

**Autoignition Temperature:** N.A.

**Decomposition Temperature:** N.D.

**Viscosity:** N.D.

**% Volatile (wt%):** N.D.

**VOC (wt%):** 0

**VOC (lbs/gal):** 0

**Fire Point:** N.D.

## 10. STABILITY AND REACTIVITY

**Reactivity:** No data available.

**Chemical Stability:** Stable under normal conditions.

**Possibility of Hazardous Reactions:** Hazardous polymerization will not occur under normal conditions. May release hydrogen chloride gas at elevated temperatures. May react with certain metals to produce flammable hydrogen gas. Contact with water may cause violent reaction with evolution of heat. To dilute: Add product

**FERRIC CHLORIDE SOL'N TECH GRADE**

Product ID: MI060001

slowly to lukewarm water; not water to product. Hazardous gases are evolved on contact with chemicals such as cyanides, sulfides, carbides, etc. Contact with oxidizing agents may produce chlorine gas. May react violently with incompatible substances, releasing large amounts of heat.

**Conditions to Avoid:** Avoid elevated temperatures. Avoid heat, sparks or open flames. Keep away from incompatibles.

**Incompatible Materials:** Metals. Bases. Strong reducing agents. Oxidizing agents. Alcohols. Sulfides. Monomers (e.g. Styrene).

**Hazardous Decomposition Products:** Hydrogen chloride gas. Hydrogen gas. Chlorine.

**11. TOXICOLOGICAL INFORMATION**

<u>Component</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Inhalation LC50</u>
Ferric Chloride	Rat: 450 mg/kg	No Data	No Data
Hydrogen Chloride	Rat: 700 mg/kg	Rabbit: > 5010 mg/kg	1H Rat: 3,124.0 ppm

**Acute Toxicity Estimate (ATE):**

**Oral:** 986 mg/kg

**Routes of Exposure:** Eyes. Ingestion. Inhalation. Skin.

**Eye Contact:** CORROSIVE-Causes severe irritation and burns. May cause: tearing. tissue discoloration. blurred vision. severe eye damage. blindness.

**Skin Contact:** CORROSIVE-Causes severe irritation and burns. Mists may cause: severe irritation. burns. Symptoms may include: drying. discomfort. severe burns. tissue damage. Prolonged or repeated exposure with dilute solutions may cause: dermatitis (inflammation of the skin). Contact may cause: permanent skin damage. ulceration. discoloration.

**Skin Absorption:** No absorption hazard expected under normal use.

**Inhalation:** CORROSIVE-Causes severe irritation and burns. Vapors or mists may irritate or burn: nose. throat. respiratory tract. Symptoms may include: burning sensation. coughing. shortness of breath. lung inflammation. pulmonary edema. choking. difficulty breathing. headache. rapid heart beat. Prolonged or severe overexposure may cause: tissue destruction. death. Effects may be delayed.

**Ingestion:** CORROSIVE-Causes severe irritation and burns. May irritate or burn: mouth. throat. digestive tract. Symptoms may include: nausea. vomiting. abdominal pain. diarrhea. coma. death. Effects may be delayed. May cause: abnormal kidney function. abnormal liver function. Aspiration can result in severe lung damage or death.

**Medical Conditions Aggravated by Exposure to Product:** Eye disorders. Respiratory system disorders. Skin disorders.

**Other:** Chronic or prolonged exposure may be associated with changes in pulmonary function, laryngitis, glottal edema, chronic bronchitis, dermatitis, erosion of tooth enamel, conjunctivitis and upper respiratory tract irritation.

**Cancer Information:**

This product does not contain 0.1% or more of the known or potential carcinogens listed in NTP, IARC, or OSHA.

Based on Ferric Chloride solid (anhydrous): Mutagenicity: Other mutation test systems: Escherichia coli - 500 nmol/tube; Phage inhibition capacity: Escherichia coli 41 ng/well; Reproductive Effects: TDLo Rat 1 day(s) intratesticular 12976 ug/kg; TDLo Rat 1 day(s) intravaginal 29 mg/kg pre pregnancy continuous; Teratogenicity and Fetotoxicity: Not available; Synergistic Materials: Not available.

**12. ECOLOGICAL INFORMATION**

**Ecotoxicological Information:** Fat Head Minnows: LC50 > 1000 ppm; Daphnia Magna: LC50 > 1000 ppm

**Chemical Fate Information:** This product should not be allowed to enter drains or water courses or be deposited where it can affect ground or surface waters.

FERRIC CHLORIDE SOL'N TECH GRADE  
Product ID: MI060001

### 13. DISPOSAL CONSIDERATIONS

Hazardous Waste Number: D002

**Disposal Method:** Dispose of in a permitted hazardous waste management facility following all local, state and federal regulations. Since emptied containers retain product residue, follow label warnings even after container is emptied. DO NOT pressurize, cut, weld, solder, drill, grind or expose empty containers to heat, flame, sparks or other sources of ignition. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator.

### 14. TRANSPORT INFORMATION

DOT (Department of Transportation):

Identification Number: UN2582  
 Proper Shipping Name: Ferric Chloride, Solution  
 Hazard Class: 8  
 Packing Group: III  
 Label Required: CORROSIVE  
 Reportable Quantity (RQ): 1000# (Ferric Chloride); 5000# (Hydrogen Chloride)

### 15. REGULATORY INFORMATION

**TSCA Inventory Status:** All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements.

**SARA Title III Section 311/312 Category Hazards:**

	<u>Immediate (Acute)</u>		<u>Delayed (Chronic)</u>		<u>Fire Hazard</u>		<u>Pressure Release</u>		<u>Reactive</u>	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
<b>Regulated Components:</b>										
<b>Component</b>			<b>CAS</b>	<b>CERCLA</b>	<b>SARA</b>	<b>SARA</b>	<b>U.S.</b>	<b>WI</b>	<b>Prop</b>	
			<b>Number</b>	<b>RQ</b>	<b>EHS</b>	<b>313</b>	<b>HAP</b>	<b>HAP</b>	<b>65</b>	
Ferric Chloride			7705-08-0	Yes	No	No	No	Yes	No	
Hydrogen Chloride			7647-01-0	Yes	Yes	Yes	Yes	Yes	No	

**\*Prop 65 - May Contain the Following Trace Components:**

No data available.

**Note:** RQ, TPQ, Section 313 reporting requirements are dependent upon individual ingredients. Hydrogen Chloride (gas and aerosol forms only) is on the Extremely Hazardous Substance List. In liquid form, Hydrogen Chloride (Hydrochloric Acid) is not required to be reported as an Extremely Hazardous Substance, but is subject to SARA 311 and 312 reporting requirements. Hydrochloric Acid also appears on the Section 313 list; however, the listing only applies to the gas and aerosol forms of Hydrochloric Acid.

### 16. OTHER INFORMATION

**Hazard Rating System**

Health: 3\*

Flammability: 0

Reactivity: 0

\* = Chronic Health Hazard

**NFPA Rating System**

Health: 3

Flammability: 0

Reactivity: 0

Special Hazard: None

**FERRIC CHLORIDE SOL'N TECH GRADE**Product ID: MI060001

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**MSDS Abbreviations**

N.A. = Not Applicable

N.D. = Not Determined

HAP = Hazardous Air Pollutant

VOC = Volatile Organic Compound

C = Ceiling Limit

N.E./Not Estab. = Not Established

**MSDS Prepared by: JAK**

Reason for Revision: New format. Changes made throughout the SDS.

Revised: 02-10-2014

Replaces: 08-04-2011

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The data in this Safety Data Sheet relates to the specific material designated and does not relate to its use in combination with any other material or process. The data contained is believed to be correct. However, since conditions of use are outside our control it should not be taken as warranty or representation for which HYDRITE CHEMICAL CO. assumes legal responsibility. This information is provided solely for your consideration, investigation, and verification.

## SAFETY DATA SHEET

**SULFURIC ACID 66 DEG.**

Product ID: AC006600

Revised: 02-14-2014

Replaces: 10-12-2009

### 1. IDENTIFICATION

Product Name: SULFURIC ACID 66 DEG.  
 Synonyms: Sulfuric acid; Oil of vitriol; Hydrogen sulfate  
 CAS Number: MIXTURE  
 Recommended Use: No data available.  
 Restrictions on Use: No data available.

Hydrite Chemical Co.  
 300 N. Patrick Blvd.  
 Brookfield, WI 53008-0948  
 (262) 792-1450

#### EMERGENCY RESPONSE NUMBERS:

24 Hour Emergency #: (414) 277-1311

CHEMTREC Emergency #: (800) 424-9300

### 2. HAZARD(S) IDENTIFICATION



**Signal Word:** Danger

**GHS Classification:** Substance or mixture corrosive to metals Category 1  
 Skin Corrosion/Irritation Category 1A  
 Serious Eye Damage/Eye Irritation Category 1  
 Carcinogenicity Category 1A  
 Acute Toxicity - Inhalation Vapour Category 2  
 Specific Target Organ Systemic Toxicity (STOT) - Repeated Exposure Category 2  
 Acute Toxicity - Inhalation Dust / Mist Category 3

**Hazard Statements:** May be corrosive to metals.  
 Causes severe skin burns and eye damage.  
 Fatal if inhaled.  
 Toxic if inhaled.  
 May cause cancer.  
 May cause damage to organs (teeth, respiratory system) through prolonged or repeated exposure (by inhalation).

**Precautionary Statements:**

**Prevention:** Obtain special instructions before use.  
 Do not handle until all safety precautions have been read and understood.  
 Keep only in original container.  
 Do not breathe dust, fume, gas, mist, vapours or spray.  
 Wash thoroughly after handling.  
 Use only outdoors or in a well-ventilated area.  
 Wear gloves, eye and face protection and protective clothing.  
 Wear respiratory protection.

**Response:** IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

**SULFURIC ACID 66 DEG.**  
**Product ID: AC006600**

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 Immediately call a POISON CENTER or doctor/physician.  
 Specific treatment is urgent (see First Aid on SDS or on this label).  
 Wash contaminated clothing before reuse.  
 Absorb spillage to prevent material damage.

**Storage:** Store in a well-ventilated place. Keep container tightly closed.  
 Store in a secure manner.  
 Store in corrosive resistant container with a resistant inner liner.

**Disposal:** Dispose of in accordance with local, regional and international regulations.

**Hazards Not Otherwise Classified:** None known.

**Percentage of Components with Unknown Acute Toxicity:**

**Dermal:** 93.2 %

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component</u>	<u>CAS Number</u>	<u>% by Wt.</u>
Sulfuric Acid	7664-93-9	93.19 %

### 4. FIRST-AID MEASURES

**Eye Contact:** Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Tilt head to avoid contaminating unaffected eye. Get immediate medical attention.

**Skin Contact:** Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Do not reuse clothing and shoes until cleaned. Discard contaminated leather articles such as shoes and belt. Do not apply oils or ointments unless ordered by the physician.

**Inhalation:** Remove to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration, preferably mouth-to-mouth. GET MEDICAL ATTENTION IMMEDIATELY.

**Ingestion:** If fully conscious, drink a quart of water. DO NOT induce vomiting. CALL A PHYSICIAN IMMEDIATELY. If unconscious or in convulsions, take immediately to a hospital or a physician. NEVER induce vomiting or give anything by mouth to an unconscious victim. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs.

**Note to Physicians:**

This product contains materials that may cause severe pneumonitis if aspirated. If ingestion has occurred less than 2 hours earlier, carry out careful gastric lavage; use endotracheal cuff if available, to prevent aspiration. Observe patient for respiratory difficulty from aspiration pneumonitis. Give artificial resuscitation and appropriate chemotherapy if respiration is depressed. Following exposure the patient should be kept under medical review for at least 48 hours as delayed pneumonitis may occur. DO NOT attempt to neutralize the acid with weak bases since the reaction will produce heat that may extend the corrosive injury.

**Most Important Symptoms/Effects:**

**Eye Contact:** CORROSIVE-Causes severe irritation and burns. May cause: blurred vision, redness, pain, conjunctivitis, ulcerations, tissue destruction, permanent eye damage, blindness.

**Skin Contact:** CORROSIVE-Causes severe irritation and burns. Concentrated solutions may cause: severe burns, severe necrosis, permanent skin damage. Prolonged and repeated exposure to dilute solutions may cause irritation, redness, pain and drying and cracking of the skin.

**SULFURIC ACID 66 DEG.**

Product ID: AC005600

**Skin Absorption:** No data available.

**Inhalation:** CORROSIVE-Causes severe irritation and burns. Vapors or mists may damage: mucous membranes, respiratory tract. Vapors or mists may cause: coughing, sore throat, shortness of breath, labored breathing, choking, bronchospasms, chemical pneumonitis, pulmonary edema, death. Effects may be delayed. Chronic exposure may cause: dental erosions, discoloration of teeth, bronchitis, bronchial emphysema.

**Ingestion:** CORROSIVE-Causes severe irritation and burns. May cause damage to the: mouth, throat, esophagus, stomach, gastrointestinal tract. May cause: pain, vomiting, diarrhea, bleeding, labored breathing, burns or perforation of the gastrointestinal tract leading to ulceration and secondary infection, death. Effects may be delayed. Aspiration into the lungs may cause chemical pneumonia and lung damage.

**5. FIRE-FIGHTING MEASURES**

**Extinguishing Media:** Carbon dioxide, Dry chemical, Foam.

**Fire Fighting Methods:** Evacuate area of unprotected personnel. Wear protective clothing including NIOSH-approved self-contained breathing apparatus. Remain upwind of fire to avoid hazardous vapors and decomposition products. Use water spray to cool fire-exposed containers. Do not get water inside containers. Product generates heat upon addition of water, with possible spattering. Neutralize run-off with Lime, Soda Ash, etc., to prevent corrosion of metals and formation of Hydrogen gas. Run-off from fire control may cause pollution.

**Fire and Explosion Hazards:** Product may react with some metals (ex.: Aluminum, Zinc, Tin, etc.) to release flammable hydrogen gas. Will react with organic materials with evolution of heat and sulfur dioxide. Concentrated acid is a strong oxidizing agent. May cause ignition of combustible materials on contact with generation of sulfur dioxide fumes.

**Hazardous Combustion Products:** Sulfur oxides.

**6. ACCIDENTAL RELEASE MEASURES**

**Spill Clean-Up Procedures:** CORROSIVE MATERIAL. Evacuate unprotected personnel from area. Maintain adequate ventilation. Follow personal protective equipment recommendations found in Section 8. Never exceed any occupational exposure limit. Contain spill, place into drums for proper disposal. Flush remaining area with water and neutralize with Soda Ash or Lime and dispose of properly. Avoid direct discharge to sewers and surface waters. Notify authorities if entry occurs.

**7. HANDLING AND STORAGE**

**Handling:** Avoid contact with eyes, skin, and clothing. Use with adequate ventilation. Do not swallow. Avoid breathing vapors, mists, or dust. Do not eat, drink, or smoke in work area. Wash thoroughly after handling. Empty containers retain product residue (vapor, dust, or liquid) and can be dangerous. DO NOT pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other source of ignition. They may explode and cause injury or death. Ground lines and equipment used during transfer to reduce the possibility of static spark-initiated fire or explosion. Use non-sparking tools.

**Storage:** CORROSIVE MATERIAL. Store in a cool, well ventilated area, out of direct sunlight. Store in a dry location away from heat. Keep away from incompatible materials. Keep containers tightly closed. Do not store in unlabeled or mislabeled containers. Do not freeze. Highly corrosive to most metals with evolution of hydrogen gas. Explosive/flammable concentrations of hydrogen gas may accumulate inside metal containers. Elevated temperatures will increase the corrosion rate of most metals. See Section 10 for incompatible materials.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**OSHA Exposure Guidelines:**

<u>Component</u>	<u>Limits</u>
Sulfuric Acid	1 mg/m <sup>3</sup> TWA

**ACGIH Exposure Guidelines:**

<u>Component</u>	<u>Limits</u>
------------------	---------------

**SULFURIC ACID 66 DEG.**  
**Product ID: AC006600**

Sulfuric Acid

0.2 mg/m<sup>3</sup> TWA (thoracic fraction)

**Engineering Controls:** Local exhaust ventilation, process enclosures, or other engineering controls are required when handling or using this product to avoid overexposure. Maintain adequate ventilation. Do not use in closed or confined spaces. Avoid creating dust or mist. Keep levels below exposure limits. To determine exposure levels, monitoring should be performed regularly.

**Eye/Face Protection:** Wear chemical safety goggles and a full face shield while handling this product. Do not wear contact lenses.

**Skin Protection:** Prevent contact with this product. Wear gloves and protective clothing depending on condition of use. Protective gloves: Acid-proof. Chemical-resistant. Impervious.

**Respiratory Protection:** Respiratory protection must be worn if ventilation does not eliminate symptoms or keep levels below recommended exposure limits. If exposure limits are exceeded, wear: NIOSH-Approved air-purifying respirator with: Acid gas cartridge and Dust/mist filter. NIOSH-Approved positive pressure supplied air respirator. NIOSH-Approved self-contained breathing apparatus. DO NOT exceed limits established by the respirator manufacturer. All respiratory protection programs must comply with OSHA 29 CFR 1910.134 and ANSI Z88.2 requirements and must be followed whenever workplace conditions require a respirator's use.

**Other Protective Equipment:** Eye-wash station. Safety shower. Rubber apron. Chemical safety shoes. Rubber boots. Protective clothing. Full-rubber acid suit.

**General Hygiene Conditions:** Wash with soap and water before meal times and at the end of each work shift. Food, beverages, and tobacco products should not be carried, stored or consumed where this material is in use.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical State:** Oily liquid.

**Color:** Clear to cloudy. Colorless to amber.

**Odor:** Odorless to pungent.

**Odor Threshold:** N.D.

**pH:** < 1.00

**Freezing Point (deg. F):** ~ -21

**Melting Point (deg. F):** N.A.

**Initial Boiling Point or Boiling Range:** ~ 529 °F

**Flash Point:** N.A.

**Flash Point Method:** N.A.

**Evaporation Rate (nBuAc = 1):** <1

**Flammability (solid, gas):** N.D.

**Lower Explosion Limit:** N.A.

**Upper Explosion Limit:** N.A.

**Vapor Pressure (mm Hg):** 0.0016 @102F

**Vapor Density (air=1):** 3.4 (H<sub>2</sub>SO<sub>4</sub>)

**Specific Gravity or Relative Density:** 1.835 @25C

**Solubility in Water:** Complete

**Partition Coefficient (n-octanol/water):** N.D.

**Autoignition Temperature:** No Data

**Decomposition Temperature:** N.D.

**Viscosity:** N.D.

**% Volatile (wt%):** N.D.

**VOC (wt%):** 0

**VOC (lbs/gal):** 0

**Fire Point:** N.D.

## 10. STABILITY AND REACTIVITY

**Reactivity:** No data available.

**Chemical Stability:** Stable under normal conditions.

**SULFURIC ACID 66 DEG.**  
**Product ID: AC006600**

**Possibility of Hazardous Reactions:** Hazardous polymerization will not occur under normal conditions. May react with certain metals to produce flammable hydrogen gas. Hazardous gases are evolved on contact with chemicals such as cyanides, sulfides, carbides, etc.

**Conditions to Avoid:** Avoid contact with heat, sparks, electric arcs, other hot surfaces, and open flames. Contact with organic materials may cause fire and explosions. Contact with water may cause violent reaction with evolution of heat. To dilute: Add product slowly to lukewarm water; not water to product.

**Incompatible Materials:** Metals. Water. Alkalies. Strong oxidizing agents. Reducing agents. Carbonates. Cyanides. Sulfides. Carbides. Chlorates. Fulminates. Nitrates. Powdered metals. Organic materials. Combustible materials. Nitrogen compounds. Picrates. Bases. Halogens. Alkali metals, and many other reactive substances.

**Hazardous Decomposition Products:** Sulfur oxides. Sulfuric acid vapors. Hydrogen gas.

### 11. TOXICOLOGICAL INFORMATION

<u>Component</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Inhalation LC50</u>
Sulfuric Acid	Rat: 2140 mg/kg	No Data	2H Rat: 510.0 mg/m <sup>3</sup>

**Acute Toxicity Estimate (ATE):**

Inhalation Vapor: 0.5473 mg/L

Inhalation Dust/Mist: 0.5473 mg/L

**Routes of Exposure:** Eyes. Ingestion. Inhalation. Skin.

**Eye Contact:** CORROSIVE-Causes severe irritation and burns. May cause: blurred vision, redness, pain, conjunctivitis, ulcerations, tissue destruction, permanent eye damage, blindness.

**Skin Contact:** CORROSIVE-Causes severe irritation and burns. Concentrated solutions may cause: severe burns, severe necrosis, permanent skin damage. Prolonged and repeated exposure to dilute solutions may cause irritation, redness, pain and drying and cracking of the skin.

**Skin Absorption:** No data available.

**Inhalation:** CORROSIVE-Causes severe irritation and burns. Vapors or mists may damage: mucous membranes, respiratory tract. Vapors or mists may cause: coughing, sore throat, shortness of breath, labored breathing, choking, bronchospasms, chemical pneumonitis, pulmonary edema, death. Effects may be delayed. Chronic exposure may cause: dental erosions, discoloration of teeth, bronchitis, bronchial emphysema.

**Ingestion:** CORROSIVE-Causes severe irritation and burns. May cause damage to the: mouth, throat, esophagus, stomach, gastrointestinal tract. May cause: pain, vomiting, diarrhea, bleeding, labored breathing, burns or perforation of the gastrointestinal tract leading to ulceration and secondary infection, death. Effects may be delayed. Aspiration into the lungs may cause chemical pneumonia and lung damage.

**Medical Conditions Aggravated by Exposure to Product:** Eye disorders. Skin disorders. Respiratory system disorders.

**Other:** Circulatory collapse with clammy skin, weak and rapid pulse, shallow respirations, and scanty urine may follow skin contact or ingestion. Circulatory shock is often the immediate cause of death. The International Agency for Research on Cancer (IARC) has concluded that occupational exposure to strong inorganic acid mists containing sulfuric acid is carcinogenic to man, causing cancer of the larynx (the voice box). Although no direct link has been established between exposure to sulfuric acid itself, and cancer in man, exposure to any mist or aerosol during the use of this product should be avoided.

**Cancer Information:**

This product contains 0.1% or more of the following chemicals listed by NTP, IARC or OSHA as known or possible carcinogens:

Sulfuric acid mist

### 12. ECOLOGICAL INFORMATION

**Ecotoxicological Information:** No data available.

SULFURIC ACID 66 DEG.  
Product ID: AC006600

Chemical Fate Information: No data available.

### 13. DISPOSAL CONSIDERATIONS

Hazardous Waste Number: D002

Disposal Method: Dispose of in a permitted hazardous waste management facility following all local, state and federal regulations. Since emptied containers retain product residue, follow label warnings even after container is emptied. DO NOT pressurize, cut, weld, solder, drill, grind or expose empty containers to heat, flame, sparks or other sources of ignition.

### 14. TRANSPORT INFORMATION

DOT (Department of Transportation):

Identification Number: UN1830  
Proper Shipping Name: SULFURIC ACID  
Hazard Class: 8  
Packing Group: II  
Label Required: CORROSIVE  
Reportable Quantity (RQ): 1000# (Sulfuric Acid)

### 15. REGULATORY INFORMATION

TSCA Inventory Status: All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements.

SARA Title III Section 311/312 Category Hazards:

	<u>Immediate (Acute)</u>	<u>Delayed (Chronic)</u>	<u>Fire Hazard</u>	<u>Pressure Release</u>	<u>Reactive</u>				
	Yes	Yes	No	No	Yes				
Regulated Components:									
<u>Component</u>			<u>CAS</u>	<u>CERCLA</u>	<u>SARA</u>	<u>SARA</u>	<u>U.S.</u>	<u>WI</u>	<u>Prop</u>
			<u>Number</u>	<u>RQ</u>	<u>EHS</u>	<u>313</u>	<u>HAP</u>	<u>HAP</u>	<u>65</u>
Sulfuric Acid			7664-93-9	Yes	Yes	Yes	No	Yes	Yes

Note: \* Sulfuric acid appears on the Section 313 List. However, the listing only applies to the aerosol forms of sulfuric acid.

### 16. OTHER INFORMATION

#### Hazard Rating System

Health: 3\*  
Flammability: 0  
Reactivity: 2

\* = Chronic Health Hazard

#### NFPA Rating System

Health: 3  
Flammability: 0  
Reactivity: 2  
Special Hazard: W

#### MSDS Abbreviations

N.A. = Not Applicable  
N.D. = Not Determined  
HAP = Hazardous Air Pollutant  
VOC = Volatile Organic Compound  
C = Ceiling Limit  
N.E./Not Estab. = Not Established

**SULFURIC ACID 66 DEG.**  
**Product ID: AC006600**

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**MSDS Prepared by: CSH**

**Reason for Revision:** New format. Changes made throughout the MSDS.

**Revised:** 02-14-2014

**Replaces:** 10-12-2009

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The data in this Material Safety Data Sheet relates to the specific material designated and does not relate to its use in combination with any other material or process. The data contained is believed to be correct. However, since conditions of use are outside our control it should not be taken as warranty or representation for which HYDRITE CHEMICAL CO. assumes legal responsibility. This information is provided solely for your consideration, investigation, and verification.

## SAFETY DATA SHEET

MURIATIC ACID 20 DEG. INHIBITED

Product ID: AC002107

Revised: 02-27-2014

Replaces: 12-04-2009

### 1. IDENTIFICATION

Product Name: MURIATIC ACID 20 DEG. INHIBITED  
 Synonyms: Hydrochloric Acid; Hydrogen Chloride  
 CAS Number: MIXTURE  
 Recommended Use: No data available.  
 Restrictions on Use: No data available.

Hydrite Chemical Co.  
 300 N. Patrick Blvd.  
 Brookfield, WI 53008-0948  
 (262) 792-1450

EMERGENCY RESPONSE NUMBERS:  
 24 Hour Emergency #: (414) 277-1311  
 CHEMTREC Emergency #: (800) 424-9300

### 2. HAZARD(S) IDENTIFICATION



Signal Word: Danger

GHS Classification: Substance or mixture corrosive to metals Category 1  
 Skin Corrosion/Irritation Category 1A  
 Serious Eye Damage/Eye Irritation Category 1  
 Specific Target Organ Systemic Toxicity (STOT) - Single Exposure Category 2  
 Specific Target Organ Systemic Toxicity (STOT) - Repeated Exposure Category 2  
 Hazardous to the aquatic environment - Acute Category 3

Hazard Statements: May be corrosive to metals.  
 Causes severe skin burns and eye damage.  
 May cause damage to organs (respiratory system by inhalation).  
 May cause damage to organs (teeth, respiratory system) through prolonged or repeated exposure (by inhalation).  
 Harmful to aquatic life.

Precautionary Statements:

Prevention: Keep only in original container.  
 Do not breathe dust, fume, gas, mist, vapors or spray.  
 Wash thoroughly after handling.  
 Do not eat, drink or smoke when using this product.  
 Avoid release to the environment.  
 Wear gloves, eye and face protection and protective clothing.

Response: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

**MURIATIC ACID 20 DEG. INHIBITED**

Product ID: AC002107

lenses, if present and easy to do. Continue rinsing.  
 Immediately call a POISON CENTER or doctor/physician.  
 Specific treatment (see on this label).  
 Wash contaminated clothing before reuse.  
 Absorb spillage to prevent material damage.

**Storage:** Store in a secure manner.  
 Store in corrosive resistant container with a resistant inner liner.

**Disposal:** Dispose of in accordance with local, regional and international regulations.

**Hazards Not Otherwise Classified:** Reacts with most metals to form explosive/flammable hydrogen gas. May react violently with water.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

<u>Component</u>	<u>CAS Number</u>	<u>% by Wt.</u>
Hydrogen Chloride	7647-01-0	~ 31.5 %

**4. FIRST-AID MEASURES**

**Eye Contact:** If in eyes: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Tilt head to avoid contaminating unaffected eye. Get immediate medical attention. Do not attempt to neutralize with chemical agents.

**Skin Contact:** If on skin: Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Do not apply oils or ointments unless ordered by the physician.

**Inhalation:** If inhaled: Remove to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration, preferably mouth-to-mouth. GET MEDICAL ATTENTION IMMEDIATELY.

**Ingestion:** If swallowed: If fully conscious, drink a quart of water. DO NOT induce vomiting. CALL A PHYSICIAN IMMEDIATELY. If unconscious or in convulsions, take immediately to a hospital or a physician. NEVER induce vomiting or give anything by mouth to an unconscious victim. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs.

**Note to Physicians:**

There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient.

**Most Important Symptoms/Effects:**

**Eye Contact:** CORROSIVE-Causes severe irritation and burns. Liquid or vapor may cause: severe irritation, pain, redness, watering, corneal opacity, burns, tissue destruction, permanent eye damage, blindness.

**Skin Contact:** CORROSIVE-Causes severe irritation and burns. Causes: pain, redness, blistering, swelling, skin damage, scarring, permanent skin damage, death. Mists may cause: irritation, burns.

**Skin Absorption:** No absorption hazard expected under normal use. Less exposure may cause: dermatitis and photo sensitization. Usually penetrates the full thickness of the skin.

**Inhalation:** CORROSIVE-Causes severe irritation and burns. Harmful or fatal if inhaled. Vapors or mists irritate or burn the: nose, throat, upper respiratory tract. May cause: respiratory irritation, bleeding of the nose and gums, sore throat, coughing, choking, laryngeal spasms, difficulty breathing, shortness of breath, pulmonary edema. Prolonged exposure may cause: burns and ulcers to the nose and throat. Symptoms of exposure may be delayed by several hours.

**Ingestion:** CORROSIVE-Causes severe irritation and burns. Harmful or fatal if swallowed. Causes burns of the: mouth, throat, esophagus, stomach. Symptoms may include: difficulty swallowing, intense thirst, nausea, vomiting, diarrhea, stomach pain, circulatory collapse. Severe exposures may cause: collapse, death. Aspiration can result in severe lung damage or death.

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## 5. FIRE-FIGHTING MEASURES

**Extinguishing Media:** Not combustible. For fires in area use appropriate media. For example: Water spray. Carbon dioxide. Dry chemical. Foam.

**Fire Fighting Methods:** Evacuate area of unprotected personnel. Wear protective clothing including NIOSH-approved self-contained breathing apparatus. Remain upwind of fire to avoid hazardous vapors and decomposition products. Use water spray to cool fire-exposed containers and disperse vapors. Product generates heat upon addition of water, with possible spattering. Neutralize run-off with Lime, Soda Ash, etc., to prevent corrosion of metals and formation of Hydrogen gas. Run-off from fire control may cause pollution.

**Fire and Explosion Hazards:** Product may react with some metals (ex.: Aluminum, Zinc, Tin, etc.) to release flammable hydrogen gas. Explosive concentrations of Hydrogen may accumulate inside metal equipment. Heat can cause evolution of gaseous Hydrogen Chloride.

**Hazardous Combustion Products:** Hydrogen Chloride gas. Hydrogen gas. Chlorine. Halogenated compounds.

## 6. ACCIDENTAL RELEASE MEASURES

**Spill Clean-Up Procedures:** CORROSIVE MATERIAL. Evacuate unprotected personnel from area. Maintain adequate ventilation. Follow personal protective equipment recommendations found in Section 8. Never exceed any occupational exposure limit. Shut off source of leak if safe to do so. Contain spill, place into drums for proper disposal. Flush remaining area with water and neutralize with Soda Ash or Lime and dispose of properly. Avoid direct discharge to sewers and surface waters. Notify authorities if entry occurs. Keep upwind of leak or spill. Adequate ventilation is required if soda ash or limestone is used, because of the consequent release of carbon dioxide gas. CAUTION: This product may react violently with alkalies and water.

## 7. HANDLING AND STORAGE

**Handling:** Avoid contact with eyes, skin, and clothing. Use with adequate ventilation. Do not swallow. Avoid breathing vapors, mists, or dust. Do not eat, drink, or smoke in work area. Wash thoroughly after handling. When diluting or preparing solutions, slowly add acid to water to avoid boiling and splattering.

**Storage:** CORROSIVE MATERIAL. Store in a cool, well ventilated area, out of direct sunlight. Store in a dry location away from heat. Keep away from incompatible materials. Keep containers tightly closed. Do not store in unlabeled or mislabeled containers. Highly corrosive to most metals with evolution of hydrogen gas. Store below 120 Deg. F. See Section 10 for incompatible materials.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### OSHA Exposure Guidelines:

<u>Component</u>	<u>Limits</u>
Hydrogen Chloride	5 ppm Ceiling; 7 mg/m <sup>3</sup> Ceiling

### ACGIH Exposure Guidelines:

<u>Component</u>	<u>Limits</u>
Hydrogen Chloride	2 ppm Ceiling

**Engineering Controls:** General room ventilation and local exhaust are required. Process enclosures or other engineering controls may be needed to maintain airborne levels below recommended exposure limits. Avoid creating dust or mist. Maintain adequate ventilation. Do not use in closed or confined spaces. Keep levels below exposure limits. To determine exposure levels, monitoring should be performed regularly.

**Eye/Face Protection:** Wear chemical safety goggles and a full face shield while handling this product. Do not wear contact lenses.

**Skin Protection:** Prevent contact with this product. Wear gloves and protective clothing depending on condition of use. Protective gloves: Acid-proof. Gauntlet-type. Neoprene. Polyvinyl chloride. Butyl rubber. Nitrile. Teflon (R). Responder (R). Viton (R).

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**Respiratory Protection:** Respiratory protection must be worn if ventilation does not eliminate symptoms or keep levels below recommended exposure limits. If exposure limits are exceeded, wear: NIOSH-Approved air-purifying respirator with: Acid gas cartridge and HEPA filter. NIOSH-Approved Supplied Air Respirator (SAR). NIOSH-Approved self-contained breathing apparatus. DO NOT exceed limits established by the respirator manufacturer. All respiratory protection programs must comply with OSHA 29 CFR 1910.134 and ANSI Z88.2 requirements and must be followed whenever workplace conditions require a respirator's use.

**Other Protective Equipment:** Eye-wash station. Safety shower. Rubber apron. Rubber boots. Protective clothing. Full-rubber acid suit.

**General Hygiene Conditions:** Wash with soap and water before meal times and at the end of each work shift. Good manufacturing practices require gross amounts of any chemical be removed from skin as soon as practical, especially before eating or smoking.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical State:** Liquid.  
**Color:** Clear. Amber.  
**Odor:** Sharp, penetrating odor.  
**Odor Threshold:** N.D.  
**pH:** < 1.00  
**Freezing Point (deg. F):** ~ <-49  
**Melting Point (deg. F):** N.D.  
**Initial Boiling Point or Boiling Range:** ~ 176 °F  
**Flash Point:** NONE.  
**Flash Point Method:** N.A.  
**Evaporation Rate (nBuAc = 1):** N.D.  
**Flammability (solid, gas):** N.D.  
**Lower Explosion Limit:** N.A.  
**Upper Explosion Limit:** N.A.  
**Vapor Pressure (mm Hg):** ~35 @20C  
**Vapor Density (air=1):** ~1.3  
**Specific Gravity or Relative Density:** 1.161 @ 25C  
**Solubility in Water:** Complete  
**Partition Coefficient (n-octanol/water):** N.D.  
**Autoignition Temperature:** No Data  
**Decomposition Temperature:** N.D.  
**Viscosity:** N.D.  
**% Volatile (wt%):** N.D.  
**VOC (wt%):** <0.30  
**VOC (lbs/gal):** <0.03  
**Fire Point:** N.D.

## 10. STABILITY AND REACTIVITY

**Reactivity:** No data available.

**Chemical Stability:** Stable under normal conditions.

**Possibility of Hazardous Reactions:** Hazardous polymerization will not occur under normal conditions. Contact with water may cause violent reaction with evolution of heat. To dilute: Add product slowly to lukewarm water; not water to product. May react with certain metals to produce flammable hydrogen gas. Hazardous gases are evolved on contact with chemicals such as cyanides, sulfides, carbides, etc. Contact with oxidizing agents may produce chlorine gas. May react violently with incompatible substances, releasing large amounts of heat.

**Conditions to Avoid:** Avoid contact with water. Avoid heat, sparks or open flames. Avoid direct sunlight. Keep away from incompatibles.

**MURIATIC ACID 20 DEG. INHIBITED**

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**Incompatible Materials:** Most metals. Alkalies. Metal Oxides. Amines. Water-reactive substances. Sulfuric acid. Oleum. Acetic Anhydride. Carbonates. Cyanides. Sulfides. Hypochlorites. Sodium. Bases. Formaldehyde. Oxidizing agents. Reducing agents. Perchloric Acid. Potassium permanganate. Aldehydes. Epoxides. Fluorine. Acetylides. Carbides. Chlorosulfonic acid. Propylene oxide. Vinyl acetate. Hexalithium disilicide. Propiolactone.

**Hazardous Decomposition Products:** Hydrogen chloride gas. Hydrogen gas. Chlorine.

**11. TOXICOLOGICAL INFORMATION**

<u>Component</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Inhalation LC50</u>
Hydrogen Chloride	Rat: 700 mg/kg	Rabbit: > 5010 mg/kg	1H Rat: 3,124.0 ppm

**Acute Toxicity Estimate (ATE):**

Oral: 2,229 mg/kg

**Routes of Exposure:** Eyes. Ingestion. Inhalation. Skin.

**Eye Contact:** CORROSIVE-Causes severe irritation and burns. Liquid or vapor may cause: severe irritation. pain. redness. watering. corneal opacity. burns. tissue destruction. permanent eye damage. blindness.

**Skin Contact:** CORROSIVE-Causes severe irritation and burns. Causes: pain. redness. blistering. swelling. skin damage. scarring. permanent skin damage. death. Mists may cause: irritation. burns.

**Skin Absorption:** No absorption hazard expected under normal use. Less exposure may cause: dermatitis and photo sensitization. Usually penetrates the full thickness of the skin.

**Inhalation:** CORROSIVE-Causes severe irritation and burns. Harmful or fatal if inhaled. Vapors or mists irritate or burn the: nose. throat. upper respiratory tract. May cause: respiratory irritation. bleeding of the nose and gums. sore throat. coughing. choking. laryngeal spasms. difficulty breathing. shortness of breath. pulmonary edema. Prolonged exposure may cause: burns and ulcers to the nose and throat. Symptoms of exposure may be delayed by several hours.

**Ingestion:** CORROSIVE-Causes severe irritation and burns. Harmful or fatal if swallowed. Causes burns of the: mouth. throat. esophagus. stomach. Symptoms may include: difficulty swallowing. intense thirst. nausea. vomiting. diarrhea. stomach pain. circulatory collapse. Severe exposures may cause: collapse. death. Aspiration can result in severe lung damage or death.

**Medical Conditions Aggravated by Exposure to Product:** Eye disorders. Respiratory system disorders. Skin disorders.

**Other:** Contains a material which may cause damage to the upper respiratory tract and the teeth.

**Cancer Information:**

This product does not contain 0.1% or more of the known or potential carcinogens listed in NTP, IARC, or OSHA.

**12. ECOLOGICAL INFORMATION**

**Ecotoxicological Information:** Extensive data, call for information.

**Chemical Fate Information:** Extensive data, call for information.

**13. DISPOSAL CONSIDERATIONS**

**Hazardous Waste Number:** D002

**Disposal Method:** Dispose of in a permitted hazardous waste management facility following all local, state and federal regulations. If approved, neutralize material and flush to sewer. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. DO NOT pressurize, cut, weld, solder, drill, grind or expose empty containers to heat, flame, sparks or other sources of ignition. Since emptied containers retain product residue, follow label warnings even after container is emptied.

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**14. TRANSPORT INFORMATION**

DOT (Department of Transportation):

Identification Number: UN1789  
 Proper Shipping Name: Hydrochloric Acid  
 Hazard Class: 8  
 Packing Group: II  
 Label Required: CORROSIVE  
 Reportable Quantity (RQ): 5000# (Hydrogen Chloride)

**15. REGULATORY INFORMATION**

**TSCA Inventory Status:** All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements.

**SARA Title III Section 311/312 Category Hazards:**

	<u>Immediate (Acute)</u>	<u>Delayed (Chronic)</u>	<u>Fire Hazard</u>	<u>Pressure Release</u>	<u>Reactive</u>			
	Yes	No	No	Yes	Yes	<u>WI</u>	<u>Prop</u>	
<b>Regulated Components:</b>								
<u>Component</u>			<u>CERCLA</u>	<u>SARA</u>	<u>SARA</u>	<u>U.S.</u>	<u>WI</u>	<u>Prop</u>
			<u>RQ</u>	<u>EHS</u>	<u>313</u>	<u>HAP</u>	<u>HAP</u>	<u>65</u>
Hydrogen Chloride			Yes	Yes	Yes	Yes	Yes	No

**\*Prop 65 - May Contain the Following Trace Components:**

This product contains a chemical known in the State of California to cause cancer and birth defects or other reproductive harm.

**Note:** RQ, TPQ, Section 313 reporting requirements are dependent upon individual ingredients. Hydrogen Chloride (gas and aerosol forms only) is on the Extremely Hazardous Substance List. In liquid form, Hydrogen Chloride (Hydrochloric Acid) is not required to be reported as an Extremely Hazardous Substance, but is subject to SARA 311 and 312 reporting requirements. Hydrochloric Acid also appears on the Section 313 list; however, the listing only applies to the gas and aerosol forms of Hydrochloric Acid.

**16. OTHER INFORMATION****Hazard Rating System**

Health: 3  
 Flammability: 0  
 Reactivity: 1  
 \* = Chronic Health Hazard

**NFPA Rating System**

Health: 3  
 Flammability: 0  
 Reactivity: 1  
 Special Hazard: None

**MSDS Abbreviations**

N.A. = Not Applicable  
 N.D. = Not Determined  
 HAP = Hazardous Air Pollutant  
 VOC = Volatile Organic Compound  
 C = Ceiling Limit  
 N.E./Not Estab. = Not Established

MSDS Prepared by: JAK

**MURIATIC ACID 20 DEG. INHIBITED**Product ID: AC002107

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Reason for Revision: Changes made throughout the SDS.

Revised: 02-27-2014

Replaces: 12-04-2009

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The data in this Safety Data Sheet relates to the specific material designated and does not relate to its use in combination with any other material or process. The data contained is believed to be correct. However, since conditions of use are outside our control it should not be taken as warranty or representation for which HYDRITE CHEMICAL CO. assumes legal responsibility. This information is provided solely for your consideration, investigation, and verification.


**SHEBOYGAN PAINT COMPANY**

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 Sheboygan, WI 53082-0417  
 Phone: (920)458-2157  
 Customer Service: custserv@shebpaint.com

EMERGENCY CONTACT ONLY:  
 Transportation Spill Emergency (24 hour)  
 1-800-924-6804 Reference CIN 1154

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**SAFETY DATA SHEET**

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**1.0 PRODUCT AND SUPPLIER IDENTIFICATION**

<b>PRODUCT CLASS</b>	<b>TRADE NAME</b>	<b>MFG PRODUCT NO.</b>
INDUSTRIAL COATING PRODUCT	YELLOW AQUA ENAMEL	73-6381

**Identified Uses:** INDUSTRIAL COATINGS, RESINS AND PAINT RELATED MATERIALS

**Supplier:** SHEBOYGAN PAINT COMPANY  
 1439 NORTH 25th STREET / P.O. BOX 417  
 SHEBOYGAN, WI 53082-0417

**Emergency Contact:** Transportation Emergency (24 hour) 1-800-924-6804

**Other Contacts:** Customer Service (920) 458-2157  
 custserv@shebpaint.com  
 sds@shebpaint.com  
 www.shebpaint.com

**2.0 HAZARDS IDENTIFICATION**

Classification	Cat	HCODE	Description
Skin irritation	2	H315	Causes skin irritation
Eye irritant 2A	2	H319	Causes serious eye irritation
Acute toxicity oral	4	H302	Harmful if swallowed
Acute toxicity dermal	4	H312	Harmful in contact with skin
Flammable liquid	4	H227	Combustible liquid
Acute toxicity inhaled gases/vapors/dust/mist	4	H332	Harmful if inhaled
Specific target organ acute irritation-respiratory	3	H335	May cause respiratory irritation
Specific target organ toxicity acute narcotic effects (CNS)	3	H336	May cause drowsiness or dizziness
Skin sensitizer 1B	1	H317	May cause an allergic skin reaction

**Precautionary Statements:**

Wash face, hands, and any exposed skin thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/ face protection.

IF ON SKIN: Wash with soap and water.

See specific treatment for first aid in SDS section 4.

If skin irritation occurs: Get medical advice/attention.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do, continue rinsing eyes.

If eye irritation persists: Get medical advice/attention.

Do not eat, drink or smoke when using this product.

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

Rinse mouth.

Dispose of contents/container to licensed waste facility in accordance with local and national regulations, see SDS section 13 for additional information.

Call a POISON CENTER or doctor/physician if you feel unwell.

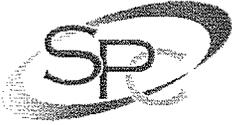
See specific measures for safe handling in SDS sections 7 and 13.

Wash contaminated clothing before reuse.

Keep away from heat/sparks/open flames/hot surfaces. NO SMOKING.

In case of fire: See SDS section 5 for specific fire extinguishing agents.

Store in a well ventilated place. Keep cool.

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Avoid breathing dust/fume/gas/mist/vapors/spray.

Use only outdoors or in a well-ventilated area.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Store in a well ventilated place. Keep container tightly closed.

Contaminated work clothing should not be allowed out of the workplace.

If skin irritation or a rash occurs: Get medical advice/attention.

Signal Word: **WARNING**

**Other Hazards Which Do Not Result In Classification:**

Use in a well ventilated area.

Do not take internally. Do not get in eyes or on skin.

Keep containers tightly closed.

Do not eat, drink or smoke when using this product. Wash face, hands and any exposed skin thoroughly after handling.


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**3.0 COMPOSITION AND INFORMATION ON INGREDIENTS**

NT INGREDIENT	CAS#	ACGIH TLV		ACGIH STEL		OSHA PEL		OSHA CEILING		LEL %	VAPOR PRESS	% BY
		PPM	mg/m3	PPM	mg/m3	PPM	mg/m3	PPM	mg/m3			
C Glycol Ether Compd. (skin)	111-76-2	20.00	97.00	-----	-----	50.00	240.0	-----	-----	1.100	0.600 @ 68.	5.60
A Secondary Butyl Alcohol	78-92-2	100.0	300.0	-----	-----	150.0	450.0	-----	-----	1.700	12.50 @ 68.	3.99
NON-HAZARDOUS COMPONENT: Water	7732-18-5	-----	-----	-----	-----	-----	-----	-----	-----	-----	17.50 @ 68.	50.3
C.I. Pigment Yellow #74	6358-31-2	-----	-----	-----	-----	-----	-----	-----	-----	-----	@	-----
Iron (III) Oxide (dust)	51274-00-1	-----	5.000	-----	-----	-----	10.00	-----	-----	-----	@	-----
Titanium Dioxide	13463-67-7	-----	10.00	-----	-----	-----	15.00	-----	-----	-----	@	-----

C -This toxic chemical is subject to the reporting requirements of both Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (40CFR372) and the Wisconsin Dept. of Natural Resources Administrative Code Chapter NR445.  
 VHAP = VOLATILE HAZARDOUS AIR POLLUTANT (VAPOR)      HAP = HAZARDOUS AIR POLLUTANT (SOLID)  
 (skin) = OSHA Skin Absorption Hazard      VOC content determined by EPA method 24.

A -This toxic chemical is subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (40CFR372).  
 VHAP = VOLATILE HAZARDOUS AIR POLLUTANT (VAPOR)  
 HAP = HAZARDOUS AIR POLLUTANT (SOLID)      VOC content determined by EPA method 24.

**4.0 FIRST AID MEASURES**

GENERAL ADVICE: If you feel unwell seek advice immediately. Physicians: treat exposures symptomatically & supportively.  
 FIRST AID FOR EYE CONTACT: Gently wash eyes and eyelids with water for several minutes. Remove contact lenses if present and easy to do.  
 FIRST AID FOR SKIN CONTACT: Remove contaminated clothing. Wash affected areas with soap and water.  
 FIRST AID FOR INHALATION OF VAPORS: Remove to fresh air. Get medical attention if irritation develops.  
 FIRST AID FOR INGESTION: No adverse conditions expected. Rinse mouth, do not induce vomiting. If large amounts are ingested or if irritation develops, get medical attention.  
 MEDICAL CONDITIONS PRONE TO AGGRAVATION BY EXPOSURE: None known, no specific information available.

**5.0 FIRE FIGHTING MEASURES**

EXTINGUISHING MEDIA: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. AVOID HIGH VOLUME WATER JET.  
 UNUSUAL FIRE & EXPLOSION HAZARDS: None expected. May emit irritating or toxic fumes or vapors during fire conditions. In high heat container pressure will increase and may burst.  
 SPECIAL FIRE FIGHTING PROCEDURES: Water may be used to cool closed containers to prevent pressure buildup. Use water spray to cool fire exposed containers if they cannot be safely moved. Keep people away from firefighting operations involving chemicals. Firefighters wear a self-contained positive pressure breathing apparatus in addition to full protective gear.  
 CONDITIONS TO AVOID: Dust particles from this product may pose a flammable or explosion hazard. Do not drag, puncture or drop container (prevent sparks). Avoid dust accumulation. Containers should be grounded. Keep away from high heat, flames, sparks or static discharge.  
 This product contains an organic pigment which when exposed to extremely high temperatures for extended periods of time may burn and smolder emitting noxious fumes that may include nitrogen, carbon and/or sulfur and other toxic compounds.



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DANGER! Combustible dust residue may form from this product. Finely divided and suspended particulates in air may form explosive mixtures. If dust clouds are formed, there is a chance of explosion hazard. Minimize airborne dust. Prevent accumulation of dust. Eliminate all fire/ignition sources including static discharge. Always bond/ground containers. Establish good housekeeping practices.

## 6.0 ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Wear appropriate personal protective equipment, avoid direct contact. Ensure adequate ventilation. Collect spill by mechanical means into a suitable container. Absorb material with dirt, sand, sawdust, or similar absorbent. Wash spill site with water.

ENVIRONMENTAL CONCERNS: Do not allow any spill to enter drains, sewers or watercourses.

WASTE DISPOSAL CONSIDERATIONS: Empty containers retain product residue. Follow all label and SDS warnings even after container is empty. Check Section 13 for disposal options.

## 7.0 HANDLING AND STORAGE

ADVICE ON SAFE HANDLING: No special handling advice required. Handle in accordance with good industrial hygiene and safety practices and the safety procedures outlined in this document. Do not store in unlabeled containers.

CONDITIONS FOR SAFE STORAGE: Store large quantities in buildings designed and protected for storage of flammable liquids. Reference the storage conditions in NFPA 30 or OSHA 1910.106. Avoid high temperatures, sparks & open flames. Do not store above 120 F. Do not store in unlabeled containers. Keep closures tight and container upright to avoid leakage.

## 8.0 EXPOSURE CONTROL / PERSONAL PROTECTION

SELECTING PROTECTIVE EQUIPMENT AND CLOTHING: When choosing personal protective equipment and clothing, consider each worker's environment, ventilation, temperature, all chemical exposures and any other adverse physical conditions. The level of protection needed for eye/skin, respiratory and other protection should be part of an ongoing job safety analysis conducted by the end user and supervisor. Safety Data Sheet Sections 2,3,8 and 11 should be consulted.

EXPOSURE CONTROLS: Provide sufficient mechanical or natural ventilation or exhaust to maintain exposures below limit guidelines or below levels that cause known, suspect or apparent side effects or the formation of flammable vapors. Allow easy access to emergency shower/eye wash facilities.

SKIN PROTECTION: Handle in accordance with good industrial hygiene and safety practices.

EYE PROTECTION: Safety glasses with side shields.

VENTILATION: Maintain adequate industrial ventilation to ensure workspaces meet OSHA safety standards.

RESPIRATORY PROTECTION: No personal respiratory protective equipment normally required. Handle in accordance with good industrial hygiene and safety practices.

OTHER PROTECTIVE EQUIPMENT: Observe good industrial hygiene practices.

Exposure Limits For Inert and Nuisance Dust Particulates Not Otherwise Classified: OSHA (PEL): TWA =15 mg/m3 (total dust) 5 mg/m3 (respirable fraction). ACGIH(TLV): TWA = 10 mg/m3 (total dust).

Exposure Limits For iron oxide (fume): (CAS# 1309-37-1) OSHA (PEL): TWA =10 mg/m3 (as total particulates) ACGIH(TLV): TWA = 5 mg/m3.

Exposure Limits for titanium dioxide(dust): OSHA (PEL): TWA =15 mg/m3 (total dust) 5mg/m3 (respirable) ACGIH(TLV): TWA =10 mg/m3 (total dust).

## 9.0 PHYSICAL AND CHEMICAL PROPERTIES



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APPEARANCE	YELLOW/ORANGE LIQUID
ODOR	Chemical
ODOR THRESHOLD (ppm)	.12
pH	8.5-9
FREEZING POINT	32 Degrees Fahrenheit, 0 Degrees Celsius
BOILING RANGE	208-650 F
FLASH POINT	N/A
EVAPORATION RATE	SLOWER THAN WATER
LEL% BY VOLUME	See Section 3
VAPOR PRESSURE	See Section 3
VAPOR DENSITY	HEAVIER THAN AIR
RELATIVE DENSITY (lbs/gal)	9.5684
SOLUBILITY	SOLUBLE IN WATER
AUTOIGNITION TEMP	>500 degrees Fahrenheit
DECOMPOSITION TEMP	(Not Determined)
VISCOSITY	30-35#3 ZAHN

## 10.0 STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable under normal storage conditions.

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: None known.

INCOMPATIBILITIES: None known.

HAZARDOUS DECOMPOSITION PRODUCTS: None known.

ADDITIONAL DECOMPOSITION PRODUCTS: Gases containing chlorine and fluorine may be produced.

## 11.0 TOXICOLOGICAL INFORMATION

ROUTES OF ENTRY: Ingestion, inhalation, eye contact, open skin.

ACUTE TOXICITY ORAL: Not classified for acute toxicity.

ACUTE TOXICITY DERMAL: Not classified for acute toxicity.

ACUTE TOXICITY INHALATION: No data available.

SKIN CORROSION/IRRITATION: No data available.

SERIOUS EYE DAMAGE/EYE IRRITATION: No data available.

RESPIRATORY SENSITIZATION: No data available.

SKIN SENSITIZATION: No data available.

SINGLE DOSE TOXICITY: No data available.

REPEATED DOSE TOXICITY: No known chronic health effects.

ASPIRATION HAZARD: No data available.

REPRODUCTIVE TOXICITY: No data available.

GERM CELL MUTAGENICITY: No data available.

OTHER EFFECTS: No data available.

EFFECTS OF OVEREXPOSURE: There is no applicable information available regarding the carcinogen potential for this product as a whole, however any relevant information regarding any ingredient status as a potential, suspect, or confirmed carcinogen is listed in section 11 of the SDS.

CARCINOGEN POTENTIAL: This product contains titanium dioxide which is listed as an IARC Class 2B possible carcinogen. This is for respirable dust exposure only. Liquid colors do not pose a dust hazard. Based upon available studies, titanium dioxide will not cause lung cancer or chronic respiratory diseases in humans at concentrations experienced in the workplace.


**SHEBOYGAN PAINT COMPANY**

1439 North 25th Street / P.O. Box 417  
 Sheboygan, WI 53082-0417  
 Phone: (920)458-2157  
 Customer Service: custserv@shebpaint.com

EMERGENCY CONTACT ONLY:  
 Transportation Spill Emergency (24 hour)  
 1-800-924-6804 Reference CIN 1154

**73-6381**
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Prolonged and continuous exposure to excessive concentration of dust of any kind without using a dust mask may have an adverse pulmonary effect on some people. This overexposure may result in coughing, sputum, and reduced lung capacity. Pre-existing asthmatic conditions may worsen. Persons with lung diseases should not work in dusty areas unless a physician certifies their fitness to wear a respirator. (OSHA 1910.134). Liquids do not pose a dust hazard. This product contains iron oxide, which is currently listed by OSHA & ACGIH as a fume hazard. Overexposure to dried particles may pose hazards to the eyes, ears & nose. Injury to the skin or mucous membranes can occur by rigorous skin cleaning or direct mechanical abrasion. Long term exposure to dust without respiratory protection may cause siderosis, a benign pneumoconiosis. Liquid products would not pose a dust hazard.

## 12.0 ECOLOGICAL INFORMATION

ECOTOXICITY FISH: No data available.  
 ECOTOXICITY AQUATIC PLANTS: No data available.  
 ECOTOXICITY AQUATIC INVERTEBRATES: No data available.  
 ECOTOXICITY MICROORGANISMS: No data available.  
 PERSISTENCE AND DEGRADABILITY: No data available.  
 BIOACCUMULATION / ACCUMULATION: No data available.  
 MOBILITY IN SOIL: No data available.  
 OTHER ADVERSE ECOLOGICAL EFFECTS: No data available.

## 13.0 DISPOSAL INFORMATION

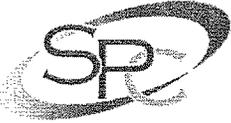
WASTE DISPOSAL: Dispose in accordance with local, state, provincial and federal regulations.  
 CONTAMINATED PACKAGING: Dispose in accordance with local, state, provincial and/or federal regulations.

## 14.0 TRANSPORTATION INFORMATION

PROPER SHIPPING NAME - NOT REGULATED, WATER BASED PRODUCT                      KEEP FROM FREEZING  
 SHIPPING LABEL - KEEP FROM FREEZING LABEL

## 15.0 REGULATORY INFORMATION

SARA 302 HAZARDS: No chemicals in this product are subject to the reporting requirements of SARA Title III Section 302.  
 SARA 304 HAZARDS: No chemicals in this product are subject to the reporting requirements of SARA Title III Section 304.  
 TSCA: All chemical substances in this product are listed by the Toxic Substance Control Act Inventory as required by 40CFR 700-799. This product complies with TSCA requirements.  
 Titanium Dioxide CAS# 14362-67-7 (liquid form not listed) (airborne, unbound particles of respirable size only)  
 This product contains C.I. Pigment Yellow #42 which is on the Pennsylvania Right-to-Know List. CAS# 20344-49-4  
 This product contains C.I. Pigment Yellow #74 which is on the Pennsylvania Right-to-Know List. CHEMICAL NAME:  
 Butanamide, 2-[(2-methoxy-4-nitrophenyl)azo]-N-(2-methoxy-phenyl)-3-oxo- CAS# 6358-31-2  
 This product contains ethylene glycol monobutyl ether which is on the New Jersey, Massachusetts and Pennsylvania Right-to-Know lists CAS# 111-76-2 (2-butoxyethanol).  
 This product contains secondary butanol or 2-butyl alcohol which is on the Massachusetts, Pennsylvania and New Jersey Right-to-Know Lists: CAS# 78-92-2  
 REGULATORY INFORMATION: This product contains trace amounts of arsenic, chromium and nickel. These metals have not been added but are part of the pigment mineral ore. Potential exposure to the California Prop 65 chemicals in this pigment have been determined to be below the No Significant Risk Level (NSRL).


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 =====  
**16.0 OTHER INFORMATION**

NOTICE: The HMIS rating for this material involves data and interpretations compiled from the various material suppliers of the component ingredients. This information will vary from supplier to supplier. The rating is intended for rapid and general identification of this product's hazards. To adequately deal with the safe handling of this material, all information contained in the SDS must be reviewed as part of an ongoing Hazard Communication Program.

This safety data sheet was prepared to comply with the U.S. OSHA Hazard Communication Standard 29 CFR 1910.1200 and the international GHS recommendations. The most current dated copy supersedes any previous dated information. Older information should be deleted to avoid confusion. VOC data determined by US EPA method 24.

DEFINITIONS: HAP = Hazardous Air Pollutant VHAP = Volatile Hazardous Air Pollutant

PRODUCT OF THE UNITED STATES

HAZARD RATING	0 - MINIMAL	3 - SERIOUS
	1 - SLIGHT	4 - SEVERE
	2 - MODERATE	* - CHRONIC

HMIS RATING      HEALTH - \* 2      FLAMMABILITY - 0      REACTIVITY - 0

DATE OF PREPARATION 07/23/16

DATE PRINTED 08/17/16



# SAFETY DATA SHEET

Issuing Date: 22-Dec-2011

Revision Date: 15-Jun-2016

Revision Number: 2

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Code: 106R350

Product Name: 3.50 VOC RED STERILKOTE 300

Hentzen Coatings, Inc.  
6937 West Mill Road, Milwaukee, WI 53218-1225

Company Phone Number: 1-414-353-4200

Emergency telephone number ChemTrec 1-800-424-9300

Recommended use of the chemical and restrictions on use Industrial paint (Paint or Paint-Related), Restricted to professional users

## 2. HAZARDS IDENTIFICATION

### Classification

#### OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 4
Skin Corrosion/Irritation	Category 2
Serious eye damage/eye irritation	Category 2
Skin sensitization	Category 1
Germ Cell Mutagenicity	Category 1B
Carcinogenicity	Category 1A
Reproductive Toxicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
Flammable Liquids	Category 1

### Label Elements

#### Emergency Overview

**DANGER**

#### Hazard Statements

Harmful if swallowed  
Causes skin irritation  
Causes serious eye irritation  
May cause an allergic skin reaction  
May cause genetic defects  
May cause cancer  
Suspected of damaging fertility or the unborn child  
May cause drowsiness or dizziness  
Extremely flammable liquid and vapor



Appearance Opaque

Physical state Liquid

Odor Solvent

#### Precautionary Statements - Prevention

Obtain special instructions before use

106R350 - 3.50 VOC RED STERILKOTE 300

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Do not handle until all safety precautions have been read and understood  
 Use personal protective equipment as required  
 Wash face, hands and any exposed skin thoroughly after handling  
 Do not eat, drink or smoke when using this product  
 Avoid breathing dust/fume/gas/mist/vapors/spray  
 Contaminated work clothing should not be allowed out of the workplace  
 Use only outdoors or in a well-ventilated area  
 Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
 Keep container tightly closed  
 Ground/Bond container and receiving equipment  
 Use explosion-proof electrical/ ventilating/ lighting/ equipment  
 Use only non-sparking tools  
 Take precautionary measures against static discharge  
 Keep cool  
 Wear protective gloves/protective clothing/eye protection/face protection

**Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 If eye irritation persists: Get medical advice/attention  
 If skin irritation or rash occurs: Get medical advice/attention  
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
 Wash contaminated clothing before reuse  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
 Rinse mouth  
 In case of fire: Use CO2, dry chemical, or foam for extinction

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed  
 Store in accordance with local regulations

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)****Other information**

- May be harmful in contact with skin

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Contains a known or suspected carcinogen**

This product contains substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990. See Section 15 for list of HAPS.

Chemical Name	CAS No	Weight-%	ACGIH	OSHA
ACETONE	67-64-1	20% - 30%	STEL: 500 ppm TWA: 250 ppm	TWA: 1000 ppm TWA: 2400 mg/m <sup>3</sup>
ETHYLENE GLYCOL BUTYL ETHER	111-76-2	10% - 20%	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m <sup>3</sup> S*
PROPYLENE CARBONATE	108-32-7	10% - 20%	N/A	N/A
BUTYL ALCOHOL	71-36-3	1% - 5%	TWA: 20 ppm	TWA: 100 ppm TWA: 300 mg/m <sup>3</sup>
4,4'-ISOPROPYLIDENEDIPHENOL(BISPHENOL A)	80-05-7	0% - 1%	N/A	N/A
NAPHTHA, PETROLEUM, HEAVY ALKYLATE	64741-65-7	0% - 1%	N/A	N/A
ETHYL ALCOHOL	64-17-5	0% - 1%	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup>

#### 4. FIRST AID MEASURES

##### First Aid Measures

<b>General advice</b>	Show this safety data sheet to the doctor in attendance. If symptoms persist, call a physician.
<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician. Immediately flush eyes with water for at least 15 minutes. Get medical attention. If easy to do, remove contact lenses. Keep eye wide open while rinsing.
<b>Skin Contact</b>	Remove and wash contaminated clothing and gloves, including the inside, before re-use. If skin irritation persists, call a physician. Immediate medical attention is not required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
<b>Inhalation</b>	If symptoms persist, call a physician. Remove to fresh air. Immediate medical attention is not required. Move to fresh air in case of accidental inhalation of vapors. Move to fresh air in case of accidental inhalation of vapors or decomposition products.
<b>Ingestion</b>	Immediate medical attention is not required. Do NOT induce vomiting. Rinse mouth. Drink plenty of water. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician if necessary.
<b>Self-protection of the first aider</b>	Remove all sources of ignition. Use personal protective equipment as required.
<b>Most important symptoms and effects, both acute and delayed</b>	
<b>Most Important Symptoms and Effects</b>	No information available.
<b>Indication of any immediate medical attention and special treatment needed</b>	
<b>Notes to physician</b>	Treat symptomatically.

#### 5. FIRE-FIGHTING MEASURES

##### Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media** No information available.

##### Specific hazards arising from the chemical

Extremely flammable. Flash back possible over considerable distance.

##### Explosion Data

**Sensitivity to Mechanical Impact** no data available.

**Sensitivity to Static Discharge** Yes.

##### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

#### 6. ACCIDENTAL RELEASE MEASURES

##### Personal precautions, protective equipment and emergency procedures

<b>Personal Precautions</b>	Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation. Take precautionary measures against static discharges. Use personal protective equipment as required. Keep people away from and upwind of spill/leak. Avoid breathing vapors or mists. Ventilate the area.
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Environmental Precautions

**Environmental Precautions** Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Vapors are heavier than air, spread along floors and form explosive mixtures with air.

Methods and materials for containment and cleaning up

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

**Methods for Cleaning Up** Pick up and transfer to properly labeled containers. Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Soak up with inert absorbent material.

**7. HANDLING AND STORAGE**Precautions for safe handling

**Advice on safe handling** Ensure adequate ventilation. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Use explosion-proof electrical (ventilation and lighting) equipment. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use with local exhaust ventilation. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe vapor or mist. Avoid contact with eyes. To dissipate static electricity during transfer, ground drum and connect to receiving container with bonding strap. Use only non-sparking tools.

Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep tightly closed in a dry and cool place. Keep in properly labeled containers. Keep in an area equipped with sprinklers. Keep containers tightly closed in a cool, well-ventilated place. Keep away from heat, sparks and flame.

**Incompatible Products** None known based on information supplied.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Control parametersExposure Guidelines

Chemical Name	ACGIH	OSHA	NIOSH IDLH
ACETONE 67-64-1	STEL: 500 ppm TWA: 250 ppm	TWA: 1000 ppm TWA: 2400 mg/m <sup>3</sup>	IDLH: 2500 ppm TWA: 250 ppm TWA: 590 mg/m <sup>3</sup>
ETHYLENE GLYCOL BUTYL ETHER 111-76-2	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m <sup>3</sup> S*	IDLH: 700 ppm TWA: 5 ppm TWA: 24 mg/m <sup>3</sup>
IRON OXIDE 1309-37-1	TWA: 5 mg/m <sup>3</sup> respirable fraction	TWA: 10 mg/m <sup>3</sup> fume TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction	IDLH: 2500 mg/m <sup>3</sup> Fe dust and fume TWA: 5 mg/m <sup>3</sup> Fe dust and fume
BUTYL ALCOHOL 71-36-3	TWA: 20 ppm	TWA: 100 ppm TWA: 300 mg/m <sup>3</sup>	IDLH: 1400 ppm Ceiling: 50 ppm Ceiling: 150 mg/m <sup>3</sup>
XYLENE(PURE) 1330-20-7	STEL: 150 ppm TWA: 100 ppm	TWA: 100 ppm TWA: 435 mg/m <sup>3</sup>	
ETHYL ALCOHOL 64-17-5	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup>	IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup>

NIOSH IDLH: Immediately Dangerous to Life or Health

Exposure controls

**Engineering Measures**  
 Showers  
 Eyewash stations  
 Ventilation systems.

**Individual protection measures, such as personal protective equipment**

**Eye/Face Protection** Use personal protective equipment as required.

**Skin and Body Protection** Chemical resistant apron.

**Respiratory Protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**Hygiene Measures** Do not eat, drink or smoke when using this product. Regular cleaning of equipment, work area and clothing is recommended.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Physical state</b>	Liquid	<b>Appearance</b>	Opaque
<b>Odor</b>	Solvent.	<b>Odor Threshold</b>	No data available
<b>pH</b>	No data available	<b>Flash Point</b>	-35 °F / -37 °C
<b>Decomposition temperature</b>	No data available	<b>Boiling Point</b>	34 °F / 1 °C
<b>Melting Point / Melting Range</b>	No data available	<b>Freezing Point</b>	No data available
<b>Vapor Pressure @20°C (kPa)</b>	No data available	<b>Partition coefficient:</b>	No data available
<b>Vapor Density</b>	No data available	<b>Density</b>	No data available
<b>Bulk density</b>	No data available	<b>Specific Gravity</b>	1.06
<b>Evaporation Rate</b>	No data available	<b>Water solubility</b>	No data available
<b>Dynamic viscosity</b>	No data available	<b>Weight per Gallon (lbs/gal):</b>	8.82
		<b>Flammability Limits in Air</b>	
		Upper	5.73 %
		Lower	1.27 %

**10. STABILITY AND REACTIVITY**

**Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Conditions to Avoid**

Heat, flames and sparks.

**Incompatible Materials**

None known based on information supplied.

**Hazardous Decomposition Products**

Thermal decomposition can lead to release of irritating gases and vapors.

**11. TOXICOLOGICAL INFORMATION**

**Information on likely routes of exposure**

**Product Information** The product has not been tested

**Inhalation** There is no data for this product.

**Eye Contact** There is no data for this product.

**Skin Contact** There is no data for this product.

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**Ingestion**

There is no data for this product.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
ACETONE 67-64-1	5800 mg/kg ( Rat )	N/A	50100 mg/m <sup>3</sup> ( Rat ) 8 h
ETHYLENE GLYCOL BUTYL ETHER 111-76-2	470 mg/kg ( Rat )	99 mg/kg ( Rabbit )	450 ppm ( Rat ) 4 h
PROPYLENE CARBONATE 108-32-7	29000 mg/kg ( Rat )	20 mL/kg ( Rabbit )	N/A
IRON OXIDE 1309-37-1	10000 mg/kg ( Rat )	N/A	N/A
BUTYL ALCOHOL 71-36-3	700 mg/kg ( Rat )	3402 mg/kg ( Rabbit )	8000 ppm ( Rat ) 4 h
4,4'-ISOPROPYLIDENEDIPHENOL (BISPHENOL A) 80-05-7	3300 mg/kg ( Rat )	3 mL/kg ( Rabbit )	0.17 mg/L ( Rat ) 6 h
XYLENE(PURE) 1330-20-7	3500 mg/kg ( Rat )	4350 mg/kg ( Rabbit )	29.08 mg/L ( Rat ) 4 h
ETHYL ALCOHOL 64-17-5	7060 mg/kg ( Rat )	N/A	124.7 mg/L ( Rat ) 4 h

**Information on toxicological effects****Symptoms**

No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure****Sensitization**

No information available.

**MUTAGENIC EFFECTS**

No information available.

**Carcinogenicity**

This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B).

Chemical Name	ACGIH	IARC	NTP	OSHA
ETHYLENE GLYCOL BUTYL ETHER 111-76-2	A3	Group 3	N/A	N/A
IRON OXIDE 1309-37-1	N/A	Group 3	N/A	N/A
XYLENE(PURE) 1330-20-7	N/A	Group 3	N/A	N/A
ETHYL ALCOHOL 64-17-5	A3	Group 1	Known	X

**Legend:****ACGIH (American Conference of Governmental Industrial Hygienists)**

A3 - Animal Carcinogen

**IARC (International Agency for Research on Cancer)**

Group 1 - Carcinogenic to Humans

Group 3 - Not Classifiable as to Carcinogenicity in Humans

**NTP (National Toxicology Program)**

Known - Known Carcinogen

**OSHA (Occupational Safety and Health Administration of the US Department of Labor)**

X - Present

**Reproductive Toxicity**

No information available.

**Specific target organ systemic toxicity (single exposure)**

No information available.

**Specific target organ systemic toxicity (repeated exposure)**

No information available.

**Chronic Toxicity**

Avoid repeated exposure. May cause adverse effects on the bone marrow and blood-forming system. May cause adverse liver effects.

**Target Organ Effects**

Blood, Central nervous system (CNS), Eyes, Gastrointestinal tract (GI), Hematopoietic System, Kidney, Liver, Respiratory system, Skin.

**Aspiration hazard**

No information available.

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Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral)	1752 mg/kg
ATEmix (dermal)	4938 mg/kg
ATEmix (inhalation-dust/mist)	7.4 mg/l
Oral LD50	2222 mg/kg (rat) Estimated
Dermal LD50	639 mg/kg (rat) Estimated
Inhalation LC50	25874 mg/l (mist) (dust) mg/m <sup>3</sup> Estimated
Inhalation LC50	

**12. ECOLOGICAL INFORMATION**Ecotoxicity

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to daphnia and other aquatic invertebrates
ACETONE 67-64-1	N/A	6210 - 8120: 96 h Pimephales promelas mg/L LC50 static 4.74 - 6.33; 96 h Oncorhynchus mykiss mL/L LC50 8300; 96 h Lepomis macrochirus mg/L LC50	10294 - 17704: 48 h Daphnia magna mg/L EC50 Static 12600 - 12700: 48 h Daphnia magna mg/L EC50
ETHYLENE GLYCOL BUTYL ETHER 111-76-2	N/A	1490: 96 h Lepomis macrochirus mg/L LC50 static 2950: 96 h Lepomis macrochirus mg/L LC50	1000: 48 h Daphnia magna mg/L EC50
PROPYLENE CARBONATE 108-32-7	500: 72 h Desmodesmus subspicatus mg/L EC50	1000: 96 h Cyprinus carpio mg/L LC50 semi-static	500: 48 h Daphnia magna mg/L EC50
BUTYL ALCOHOL 71-36-3	500: 96 h Desmodesmus subspicatus mg/L EC50 500: 72 h Desmodesmus subspicatus mg/L EC50	1910000: 96 h Pimephales promelas µg/L LC50 static 100000 - 500000: 96 h Lepomis macrochirus µg/L LC50 static 1730 - 1910: 96 h Pimephales promelas mg/L LC50 static 1740: 96 h Pimephales promelas mg/L LC50 flow-through	1897 - 2072: 48 h Daphnia magna mg/L EC50 Static 1983: 48 h Daphnia magna mg/L EC50
4,4'-ISOPROPYLIDENEDIPHENOL (BISPHENOL A) 80-05-7	2.5: 96 h Pseudokirchneriella subcapitata mg/L EC50	4: 96 h Oncorhynchus mykiss mg/L LC50 4.0 - 5.5: 96 h Pimephales promelas mg/L LC50 static 3.6 - 5.4: 96 h Pimephales promelas mg/L LC50 flow-through 9.9: 96 h Brachydanio rerio mg/L LC50 static	3.9: 48 h Daphnia magna mg/L EC50 9.2 - 11.4: 48 h Daphnia magna mg/L EC50 Static 10.2: 48 h Daphnia magna mg/L EC50
XYLENE(PURE) 1330-20-7	N/A	13.4: 96 h Pimephales promelas mg/L LC50 flow-through 2.661 - 4.093: 96 h Oncorhynchus mykiss mg/L LC50 static 13.5 - 17.3: 96 h Oncorhynchus mykiss mg/L LC50 13.1 - 16.5: 96 h Lepomis macrochirus mg/L LC50 flow-through 19: 96 h Lepomis macrochirus mg/L LC50 7.711 - 9.591: 96 h Lepomis macrochirus mg/L LC50 static 23.53 - 29.97: 96 h Pimephales promelas mg/L LC50 static 780: 96 h Cyprinus carpio mg/L LC50 30.26 - 40.75: 96 h Poecilia reticulata mg/L LC50 static 780: 96 h Cyprinus carpio mg/L LC50 semi-static	3.82: 48 h water flea mg/L EC50 0.6: 48 h Gammarus lacustris mg/L LC50
ETHYL ALCOHOL 64-17-5	N/A	13400 - 15100: 96 h Pimephales promelas mg/L LC50 flow-through 100: 96 h Pimephales promelas mg/L LC50 static 12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static	9268 - 14221: 48 h Daphnia magna mg/L LC50 2: 48 h Daphnia magna mg/L EC50 Static

Persistence and degradability

No information available.

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**Bioaccumulation**

No information available.

Chemical Name	Partition coefficient
ACETONE 67-64-1	-0.24
ETHYLENE GLYCOL BUTYL ETHER 111-76-2	0.81
PROPYLENE CARBONATE 108-32-7	0.48
BUTYL ALCOHOL 71-36-3	0.785
4,4'-ISOPROPYLIDENEDIPHENOL(BISPHENOL A) 80-05-7	2.2
ETHYL ALCOHOL 64-17-5	-0.32

**Other adverse effects**

No information available

**13. DISPOSAL CONSIDERATIONS****Waste treatment methods****Waste treatment methods**

This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).

**US EPA Waste Number**

U002 U019 U031 U122 U154 U188 U220 U239 D001

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
ACETONE 67-64-1	N/A	Included in waste stream: F039	N/A	U002
BUTYL ALCOHOL 71-36-3	N/A	Included in waste stream: F039	N/A	U031
XYLENE(PURE) 1330-20-7	N/A	Included in waste stream: F039	N/A	U239

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
ACETONE 67-64-1	Ignitable
BUTYL ALCOHOL 71-36-3	Toxic
XYLENE(PURE) 1330-20-7	Toxic Ignitable
ETHYL ALCOHOL 64-17-5	Toxic Ignitable

**14. TRANSPORT INFORMATION****DOT**

**UN-No** UN1263  
**Proper shipping name** Paint  
**Hazard class** 3  
**Packing Group** II  
**Special Provisions** 149, B52, IB2, T4, TP1, TP8, TP28  
**Description** UN1263, Paint, Marine Pollutant, 3, II, RQ  
**Emergency Response Guide Number** 128

**TDG**

**UN-No** UN1263

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Proper shipping name	Paint
Hazard class	3
Packing Group	II
Description	UN1263, Paint, Marine Pollutant, 3, II
<b><u>MEX</u></b>	
UN-No	UN1263
Proper shipping name	Paint
Hazard class	3
Packing Group	II
Description	UN1263, Paint, 3, II
<b><u>ICAO</u></b>	
UN-No	UN1263
Proper shipping name	Paint
Hazard class	3
Packing Group	II
Special Provisions	A3, A72
Description	UN1263, Paint, 3, II
<b><u>IATA</u></b>	
UN-No	UN1263
Hazard class	3
Packing Group	II
ERG Code	3L
Special Provisions	A3, A72, A192
<b><u>IMDG/IMO</u></b>	
UN-No	UN1263
Hazard class	3
Packing Group	II
EmS-No	F-E, S-E
Special Provisions	163, 367
<b><u>RID</u></b>	
UN-No	UN1263
Proper shipping name	Paint
Hazard class	3
Packing Group	II
Classification Code	F1
Description	UN1263, Paint, Environmentally Hazardous, 3, II
<b><u>ADR/RID</u></b>	
UN-No	UN1263
Proper shipping name	Paint
Hazard class	3
Packing Group	II
Classification Code	F1
Tunnel restriction code	(D/E)
Special Provisions	163, 640C, 650, 367
Description	UN1263, Paint, Environmentally Hazardous, 3, II, (D/E)
ADR/RID-Labels	3
<b><u>ADN</u></b>	
Proper shipping name	Paint
Hazard class	3
Packing Group	II
Classification Code	F1
Special Provisions	163, 640C, 650
Description	UN1263, Paint, Environmentally Hazardous, 3, II
Hazard Labels	3
Limited Quantity (LQ)	5 L
Ventilation	VE01

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**15. REGULATORY INFORMATION****International Inventories**

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS No	SARA 313 - Threshold Values %
ETHYLENE GLYCOL BUTYL ETHER	111-76-2	1.0
BUTYL ALCOHOL	71-36-3	1.0

**SARA 311/312 Hazard Categories**

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

**CAA (Clean Air Act)**

U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants This product contains the following HAPs:

Chemical Name	CAS No	Hazardous air pollutants (HAPs) content
XYLENE(PURE)	1330-20-7	Present

**Clean Water Act**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
XYLENE(PURE)	100 lb	N/A	N/A	X

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ (reportable quantity)
ACETONE	5000 lb	N/A	RQ 5000 lb final RQ RQ 2270 kg final RQ
BUTYL ALCOHOL	5000 lb	N/A	RQ 5000 lb final RQ RQ 2270 kg final RQ

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XYLENE(PURE)	100 lb	N/A	RQ 100 lb final RQ RQ 45.4 kg final RQ
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**State Regulations****California Proposition 65**

This product contains the following Proposition 65 chemicals

Chemical Name	CAS No	California Proposition 65
4,4'-ISOPROPYLIDENEDIPHENOL(BISPHENOL A)	80-05-7	Female Reproductive
ETHYL ALCOHOL	64-17-5	Carcinogen Developmental

**U.S. State Right-to-Know Regulations**

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
ACETONE	X	X	X	N/A	X
ETHYLENE GLYCOL BUTYL ETHER	X	X	X	X	X
IRON OXIDE	X	X	X	N/A	X
BUTYL ALCOHOL	X	X	X	N/A	X
PHOSPHORIC ACID	X	X	X	N/A	X
BUTYL ACETATE	X	X	X	N/A	X
XYLENE(PURE)	X	X	X	X	X
ETHYL ALCOHOL	X	X	X	X	X

**International Regulations**

Mexico - Grade

Severe risk, Grade 4

Chemical Name	Carcinogenic Status	Exposure Limits
ACETONE	N/A	Mexico: TWA 1000 ppm Mexico: TWA 2400 mg/m <sup>3</sup> Mexico: STEL 1260 ppm Mexico: STEL 3000 mg/m <sup>3</sup>
ETHYLENE GLYCOL BUTYL ETHER	N/A	Mexico: TWA 26 ppm Mexico: TWA 120 mg/m <sup>3</sup> Mexico: STEL 75 ppm Mexico: STEL 360 mg/m <sup>3</sup>
IRON OXIDE	N/A	Mexico: TWA 5 mg/m <sup>3</sup> Mexico: STEL 10 mg/m <sup>3</sup>
BUTYL ALCOHOL	N/A	Mexico: Ceiling 50 ppm Mexico: Ceiling 150 mg/m <sup>3</sup>
XYLENE(PURE)	N/A	Mexico: TWA 100 ppm Mexico: TWA 435 mg/m <sup>3</sup> Mexico: STEL 150 ppm Mexico: STEL 655 mg/m <sup>3</sup>
ETHYL ALCOHOL	N/A	Mexico: TWA 1000 ppm Mexico: TWA 1900 mg/m <sup>3</sup>

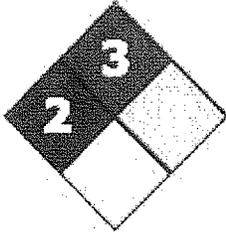
**16. OTHER INFORMATION**

**NFPA**                      Health Hazard 2                      Flammability 3                      Instability 0                      Physical and Chemical Hazards -

NFPA Rating

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HMIS                      Health Hazard 2 \*    Flammability 3            Physical Hazard 0    Personal protection X

*Chronic Hazard Star Legend*

\* *Chronic Health Hazard*

Issuing Date:                      22-Dec-2011

Revision Date:                     15-Jun-2016

Revision Note

No information available

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. 10000000

end



ISO 9001 - 2008

# SAFETY DATA SHEET

Issue Date 11-Apr-2015

Revision Date 11-Apr-2015

Version 1

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

### Product identifier

Product Code 3104

### Recommended use of the chemical and restrictions on use

Recommended Use Reserved for industrial and professional use.

### Details of the supplier of the safety data sheet

#### Supplier Address

Watson Industrial Coatings Co. D.B.A Watson Standard  
 616 Hite Road  
 Harwick PA, 15049  
 724-275-1000

### Emergency telephone number

Emergency Telephone Chemtrec 1-800-424-9300

## 2. HAZARDS IDENTIFICATION

### Classification

#### OSHA Regulatory Status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2

### Hazard symbol(s) /Pictogram(s)

#### Emergency Overview

#### Warning

#### Hazard statements

H315 - Causes skin irritation  
 H319 - Causes serious eye irritation  
 H227 - Combustible liquid



#### Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling  
 Wear protective gloves/protective clothing/eye protection/face protection  
 Keep away from heat and sparks - No Smoking

#### Precautionary Statements - Response

Specific treatment (see .? on this label)  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 If eye irritation persists: Get medical advice/attention

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IF ON SKIN: Wash with plenty of soap and water  
 If skin irritation occurs: Get medical advice/attention  
 Take off contaminated clothing and wash before reuse  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 Call a POISON CENTER or doctor/physician if you feel unwell  
 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
 Rinse mouth  
 In case of fire: Use CO2, dry chemical, or foam for extinction

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep cool

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)****3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS No	Weight-%
Titanium Dioxide	13463-67-7	10 - 30
2-Butoxy Ethanol	111-76-2	10 - 30

**4. FIRST AID MEASURES****First aid measures**

**Eye contact** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

**Skin Contact** Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician.

**Inhalation** Move to fresh air in case of accidental inhalation of vapors. If symptoms persist, call a physician.

**Ingestion** If swallowed, call a poison control center or physician immediately. Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice.

**5. FIRE-FIGHTING MEASURES****Suitable extinguishing media**

Carbon dioxide (CO2). Extinguishing powder. Dry chemical. Alcohol resistant foam. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Specific hazards arising from the chemical**

No information available.

**Explosion data**

Sensitivity to Mechanical Impact No.

Sensitivity to Static Discharge Yes.

**Protective equipment and precautions for firefighters**

Wear self-contained breathing apparatus and protective suit.

**6. ACCIDENTAL RELEASE MEASURES**

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**Personal precautions, protective equipment and emergency procedures**

**Personal precautions** ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Ensure adequate ventilation, especially in confined areas. Avoid contact with skin, eyes or clothing. All equipment used when handling the product must be grounded. Use personal protection recommended in Section 8. Wash thoroughly after handling.

**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labeled containers. Soak up with inert absorbent material. Clean contaminated surface thoroughly. Prevent product from entering drains. Take precautionary measures against static discharges. Sweep up and shovel into suitable containers for disposal.

**7. HANDLING AND STORAGE****Precautions for safe handling**

**Advice on safe handling** Avoid contact with skin, eyes or clothing. Do not breathe dust/fume/gas/mist/vapors/spray. Wash contaminated clothing before reuse. Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment. Ensure adequate ventilation, especially in confined areas. Remove all sources of ignition. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Never pierce, drill, grind, cut, saw or weld any empty container.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible materials** Strong oxidizing agents. Strong acids. Strong bases.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Control parameters**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH	Exposure Limits
Titanium Dioxide 13463-67-7	TWA: 10 mg/m <sup>3</sup>	TWA: 15 mg/m <sup>3</sup> total dust (vacated) TWA: 10 mg/m <sup>3</sup> total dust	IDLH: 5000 mg/m <sup>3</sup>	Mexico: TWA 10 mg/m <sup>3</sup> Mexico: STEL 20 mg/m <sup>3</sup>
2-Butoxy Ethanol 111-76-2	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m <sup>3</sup> (vacated) TWA: 25 ppm (vacated) TWA: 120 mg/m <sup>3</sup> (vacated) S* S*	IDLH: 700 ppm TWA: 5 ppm TWA: 24 mg/m <sup>3</sup>	Mexico: TWA 26 ppm Mexico: TWA 120 mg/m <sup>3</sup> Mexico: STEL 75 ppm Mexico: STEL 360 mg/m <sup>3</sup>

NIOSH IDLH Immediately Dangerous to Life or Health

**Other Information** Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

**Appropriate engineering controls**

**Engineering Controls** Showers  
Eyewash stations  
Ventilation systems.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Wear safety glasses with side shields (or goggles).

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**Skin and body protection** Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

**Respiratory protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

Physical state liquid  
 Odor Amines  
 Color opaque, White

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No information available	
Melting point/freezing point	No information available	
Boiling point / boiling range	No information available	
Flash Point	65.5 °C / 146.3 °F	Pensky-Martens Closed Cup (PMCC)
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Specific Gravity	1.16	
Water solubility	Soluble in water	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

### Other Information

Softening point No information available  
 Molecular weight No information available  
 VOC Content (%) No information available  
 Density 9.63 lb/gal +/- 0.2  
 Bulk density No information available

## 10. STABILITY AND REACTIVITY

Reactivity  
 Not Applicable

Chemical stability  
 Stable under normal conditions.

Possibility of Hazardous Reactions  
 None under normal processing.

**Hazardous polymerization** Hazardous polymerization does not occur.

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**Conditions to avoid**

Heat, flames and sparks.

**Incompatible materials**

Strong oxidizing agents. Strong acids. Strong bases.

**Hazardous Decomposition Products**None under normal use conditions. Thermal decomposition can lead to release of irritating and toxic gases and vapors. Carbon dioxide (CO<sub>2</sub>). Hydrocarbons.**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure**

<b>Product Information</b>	No data available
<b>Inhalation</b>	No data available.
<b>Eye contact</b>	No data available.
<b>Skin Contact</b>	No data available.
<b>Ingestion</b>	No data available.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Titanium Dioxide 13463-67-7	> 10000 mg/kg ( Rat )	-	-
2-Butoxy Ethanol 111-76-2	= 470 mg/kg ( Rat )	= 220 mg/kg ( Rabbit )	= 450 ppm ( Rat ) 4 h

**Information on toxicological effects**

**Symptoms** No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization** No information available.  
**Germ cell mutagenicity** No information available.  
**Carcinogenicity** This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B). This product contains titanium dioxide which is classified as a possible carcinogen when present as respirable dust. This is not relevant for this product since it is a liquid.

Chemical Name	ACGIH	IARC	NTP	OSHA	Mexico
Titanium Dioxide 13463-67-7	-	Group 2B	-	X	-
2-Butoxy Ethanol 111-76-2	A3	Group 3	-	-	-

*ACGIH (American Conference of Governmental Industrial Hygienists)*

*A3 - Animal Carcinogen*

*IARC (International Agency for Research on Cancer)*

*Group 2B - Possibly Carcinogenic to Humans*

*Not classifiable as a human carcinogen*

*OSHA (Occupational Safety and Health Administration of the US Department of Labor)*

*X - Present*

**Reproductive toxicity** No information available.  
**STOT - single exposure** No information available.  
**STOT - repeated exposure** No information available.  
**Aspiration hazard** No information available.

**Numerical measures of toxicity - Product Information**

**Unknown Acute Toxicity** 0.93690497% of the mixture consists of ingredient(s) of unknown toxicity  
The following values are calculated based on chapter 3.1 of the GHS document

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## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

1.93354% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
2-Butoxy Ethanol 111-76-2		1490: 96 h Lepomis macrochirus mg/L LC50 static 2950: 96 h Lepomis macrochirus mg/L LC50	1000: 48 h Daphnia magna mg/L EC50 1698 - 1940: 24 h Daphnia magna mg/L EC50

### Persistence and degradability

No information available.

### Bioaccumulation

No information available.

Chemical Name	Partition coefficient
2-Butoxy Ethanol 111-76-2	0.81

### Other adverse effects

No information available

## 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods

#### Disposal of wastes

Residual vapors may explode on ignition. Never pierce, drill, grind, cut, saw or weld any empty container. Disposal should be in accordance with applicable regional, national and local laws and regulations. Since empty containers retain product residue, follow label warnings even after container is emptied.

## 14. TRANSPORT INFORMATION

#### Note:

DOT Ground - "Non-bulk shipments may be non-regulated per 49CFR 173.150(f)(2)"

#### DOT

UN/ID No.	NA1263
Proper shipping name	Paint, combustible
Hazard Class	Combustible liquid
Packing Group	III

#### TDG

Not regulated

#### MEX

Not regulated

#### IATA

Not regulated

#### IMDG

Not regulated

## 15. REGULATORY INFORMATION

### International Inventories

TSCA	Complies
DSL/NDL	Not Determined
EINECS/ELINCS	Not Determined
ENCS	Not Determined
IECSC	Not Determined
KECL	Not Determined
PICCS	Not Determined
AICS	Not Determined

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**Legend:**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
 DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List  
 EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
 ENCS - Japan Existing and New Chemical Substances  
 IECSC - China Inventory of Existing Chemical Substances  
 KECL - Korean Existing and Evaluated Chemical Substances  
 PICCS - Philippines Inventory of Chemicals and Chemical Substances  
 AICS - Australian Inventory of Chemical Substances

**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313 - Threshold Values %
2-Butoxy Ethanol - 111-76-2	1.0

**SARA 311/312 Hazard Categories**

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	Yes
Sudden release of pressure hazard	No
Reactive Hazard	No

**US State Regulations**

This product may contain substances regulated by state right-to-know regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Pennsylvania - Special Hazardous Substances	Pennsylvania - Environmental Hazard List
Titanium Dioxide 13463-67-7	X	X	X	-	-
2-Butoxy Ethanol 111-76-2	X	X	X	-	-
Triethylamine 121-44-8	X	X	X	-	X
Silica, amorphous precipitated 112926-00-8	X	X	X	-	-
Aluminum oxide (Al <sub>2</sub> O <sub>3</sub> ) 1344-28-1	X	X	X	-	X
Stoddard solvent, solvent naphtha 8052-41-3	X	X	X	-	-
Ethanol, 2-(dimethylamino)- 108-01-0	X	X	X	-	-
2-Propanol 67-63-0	X	X	X	-	X
Cumene 98-82-8	X	X	X	-	X
Naphthalene 91-20-3	X	X	X	-	X
Ethylbenzene 100-41-4	X	X	X	-	X

**16. OTHER INFORMATION**

Issue Date

11-Apr-2015

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Revision Date 11-Apr-2015

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Revision Date 11-Apr-2015  
Revision Note No information available

**Disclaimer**

The information contained herein is derived from data provided by suppliers and other sources believed to be reliable, and is furnished without warranty of any kind. The information relating to the product is for guidance purposes only, is based only on downstream uses known to Watson Standard, and may not be valid for the product used in combination with any other materials. Users of this product must make determinations of suitability and completeness of information from this and all other sources to ensure proper use and disposal of this product, safety and health of employees, customers, and the protection of the environment. Watson Standard will not be liable for any special, incidental, or consequential damages associated with the use or handling of the product.

End of Safety Data Sheet



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# SAFETY DATA SHEET

Issue Date 08-Apr-2015

Revision Date 08-Apr-2015

Version 1

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

### Product identifier

Product Code 3223

### Recommended use of the chemical and restrictions on use

Recommended Use Reserved for industrial and professional use.

### Details of the supplier of the safety data sheet

#### Supplier Address

Watson Standard Company  
616 Hite Road  
Harwick, PA 15049  
724-275-1000

### Emergency telephone number

Emergency Telephone Chemtrec 1-800-424-9300

## 2. HAZARDS IDENTIFICATION

### Classification

#### OSHA Regulatory Status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3

### Hazard symbol(s) /Pictogram(s)

#### Emergency Overview

#### Warning

#### Hazard statements

H315 - Causes skin irritation  
H319 - Causes serious eye irritation  
H335 - May cause respiratory irritation  
H336 - May cause drowsiness or dizziness  
H227 - Combustible liquid



#### Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling  
Wear protective gloves/protective clothing/eye protection/face protection  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Use only outdoors or in a well-ventilated area  
Keep away from heat and sparks - No Smoking  
Keep cool

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Revision Date 08-Apr-2015

**Precautionary Statements - Response**

Specific treatment (see ? on this label)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing if eye irritation persists: Get medical advice/attention

IF ON SKIN: Wash with plenty of soap and water

If skin irritation occurs: Get medical advice/attention

Take off contaminated clothing and wash before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

In case of fire: Use CO2, dry chemical, or foam for extinction

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)****3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS No	Weight-%
2-Butoxy Ethanol	111-76-2	10 - 30
Iron oxide (Fe2O3)	1309-37-1	1 - 5
Titanium Dioxide	13463-67-7	1 - 5
Triethylamine	121-44-8	1 - 5

**4. FIRST AID MEASURES****First aid measures****Eye contact**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

**Skin Contact**

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician.

**Inhalation**

Move to fresh air in case of accidental inhalation of vapors. If symptoms persist, call a physician.

**Ingestion**

If swallowed, call a poison control center or physician immediately. Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice.

**5. FIRE-FIGHTING MEASURES****Suitable extinguishing media**

Carbon dioxide (CO2). Extinguishing powder. Dry chemical. Alcohol resistant foam. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Specific hazards arising from the chemical**

No information available.

**Explosion data**

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Sensitivity to Mechanical Impact No.  
Sensitivity to Static Discharge Yes.

**Protective equipment and precautions for firefighters**

Wear self-contained breathing apparatus and protective suit.

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures****Personal precautions**

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Ensure adequate ventilation, especially in confined areas. Avoid contact with skin, eyes or clothing. All equipment used when handling the product must be grounded. Use personal protection recommended in Section 8. Wash thoroughly after handling.

**Methods and material for containment and cleaning up****Methods for containment**

Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up**

Pick up and transfer to properly labeled containers. Soak up with inert absorbent material. Clean contaminated surface thoroughly. Prevent product from entering drains. Take precautionary measures against static discharges. Sweep up and shovel into suitable containers for disposal.

**7. HANDLING AND STORAGE****Precautions for safe handling****Advice on safe handling**

Avoid contact with skin, eyes or clothing. Do not breathe dust/fume/gas/mist/vapors/spray. Wash contaminated clothing before reuse. Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment. Ensure adequate ventilation, especially in confined areas. Remove all sources of ignition. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Never pierce, drill, grind, cut, saw or weld any empty container.

**Conditions for safe storage, including any incompatibilities****Storage Conditions**

Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible materials**

Strong oxidizing agents. Strong acids. Strong bases.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Control parameters**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH	Exposure Limits
2-Butoxy Ethanol 111-76-2	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m <sup>3</sup> (vacated) TWA: 25 ppm (vacated) TWA: 120 mg/m <sup>3</sup> (vacated) S* S*	IDLH: 700 ppm TWA: 5 ppm TWA: 24 mg/m <sup>3</sup>	Mexico: TWA 26 ppm Mexico: TWA 120 mg/m <sup>3</sup> Mexico: STEL 75 ppm Mexico: STEL 360 mg/m <sup>3</sup>
Iron oxide (Fe <sub>2</sub> O <sub>3</sub> ) 1309-37-1	TWA: 5 mg/m <sup>3</sup> respirable fraction	TWA: 10 mg/m <sup>3</sup> fume TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction (vacated) TWA: 10 mg/m <sup>3</sup> fume and total dust Iron oxide (vacated) TWA: 5 mg/m <sup>3</sup> respirable fraction regulated under Rouge	IDLH: 2500 mg/m <sup>3</sup> Fe dust and fume TWA: 5 mg/m <sup>3</sup> Fe dust and fume	Mexico: TWA 5 mg/m <sup>3</sup> Mexico: STEL 10 mg/m <sup>3</sup>

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Titanium Dioxide 13463-67-7	TWA: 10 mg/m <sup>3</sup>	TWA: 15 mg/m <sup>3</sup> total dust (vacated) TWA: 10 mg/m <sup>3</sup> total dust	IDLH: 5000 mg/m <sup>3</sup>	Mexico: TWA 10 mg/m <sup>3</sup> Mexico: STEL 20 mg/m <sup>3</sup>
Triethylamine 121-44-8	STEL: 3 ppm TWA: 1 ppm S*	TWA: 25 ppm TWA: 100 mg/m <sup>3</sup> (vacated) TWA: 10 ppm (vacated) TWA: 40 mg/m <sup>3</sup> (vacated) STEL: 15 ppm (vacated) STEL: 60 mg/m <sup>3</sup>	IDLH: 200 ppm	Mexico: TWA 25 ppm Mexico: TWA 100 mg/m <sup>3</sup> Mexico: STEL 40 ppm Mexico: STEL 160 mg/m <sup>3</sup>

NIOSH IDLH Immediately Dangerous to Life or Health

**Other Information** Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

#### Appropriate engineering controls

**Engineering Controls** Showers  
Eyewash stations  
Ventilation systems.

#### Individual protection measures, such as personal protective equipment

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin and body protection** Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

**Respiratory protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Information on basic physical and chemical properties

**Physical state** liquid  
**Odor** Amines  
**Color** opaque, red

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No information available	
Melting point/freezing point	No information available	
Boiling point / boiling range	No information available	
Flash Point	65.5 °C / 150 °F	Pensky-Martens Closed Cup (PMCC)
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Specific Gravity	1.06	
Water solubility	Soluble in water	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

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Other Information

Softening point No information available  
 Molecular weight No information available  
 VOC Content (%) No information available  
 Density 8.79 lb/gal  
 Bulk density No information available

**10. STABILITY AND REACTIVITY**Reactivity

Not Applicable

Chemical stability

Stable under normal conditions.

Possibility of Hazardous Reactions

None under normal processing.

**Hazardous polymerization** Hazardous polymerization does not occur.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Strong oxidizing agents. Strong acids. Strong bases.

Hazardous Decomposition ProductsNone under normal use conditions. Thermal decomposition can lead to release of irritating and toxic gases and vapors. Carbon dioxide (CO<sub>2</sub>). Hydrocarbons.**11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure

**Product Information** No data available

**Inhalation** No data available.

**Eye contact** No data available.

**Skin Contact** No data available.

**Ingestion** No data available.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
2-Butoxy Ethanol 111-76-2	= 470 mg/kg ( Rat )	= 220 mg/kg ( Rabbit )	= 450 ppm ( Rat ) 4 h
Iron oxide (Fe <sub>2</sub> O <sub>3</sub> ) 1309-37-1	> 10000 mg/kg ( Rat )	-	-
Titanium Dioxide 13463-67-7	> 10000 mg/kg ( Rat )	-	-
Triethylamine 121-44-8	= 460 mg/kg ( Rat )	= 416 mg/kg ( Rabbit ) = 570 µL/kg ( Rabbit )	= 0.42 mg/L ( Rat ) 1 h

Information on toxicological effects

**Symptoms** No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Sensitization** No information available.

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**Germ cell mutagenicity  
Carcinogenicity**

No information available.

This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B). This product contains titanium dioxide which is classified as a possible carcinogen when present as respirable dust. This is not relevant for this product since it is a liquid.

Chemical Name	ACGIH	IARC	NTP	OSHA	Mexico
2-Butoxy Ethanol 111-76-2	A3	Group 3	-	-	-
Iron oxide (Fe2O3) 1309-37-1	-	Group 3	-	-	-
Titanium Dioxide 13463-67-7	-	Group 2B	-	X	-

*ACGIH (American Conference of Governmental Industrial Hygienists)**A3 - Animal Carcinogen**IARC (International Agency for Research on Cancer)**Group 2B - Possibly Carcinogenic to Humans**Not classifiable as a human carcinogen**NTP (National Toxicology Program)**Known - Known Carcinogen**OSHA (Occupational Safety and Health Administration of the US Department of Labor)**X - Present***Reproductive toxicity**

No information available.

**STOT - single exposure**

No information available.

**STOT - repeated exposure**

No information available.

**Aspiration hazard**

No information available.

**Numerical measures of toxicity - Product Information****Unknown Acute Toxicity**

4.48338425% of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

7.63378% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
2-Butoxy Ethanol 111-76-2	-	1490: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 2950: 96 h <i>Lepomis macrochirus</i> mg/L LC50	1000: 48 h <i>Daphnia magna</i> mg/L EC50 1698 - 1940: 24 h <i>Daphnia</i> <i>magna</i> mg/L EC50
Triethylamine 121-44-8	-	43.7: 96 h <i>Pimephales promelas</i> mg/L LC50 static	200: 48 h <i>Daphnia magna</i> mg/L EC50

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

Chemical Name	Partition coefficient
2-Butoxy Ethanol 111-76-2	0.81
Triethylamine 121-44-8	1.45

**Other adverse effects**

No information available

**13. DISPOSAL CONSIDERATIONS****Waste treatment methods**

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**Disposal of wastes**

Residual vapors may explode on ignition. Never pierce, drill, grind, cut, saw or weld any empty container. Disposal should be in accordance with applicable regional, national and local laws and regulations. Since empty containers retain product residue, follow label warnings even after container is emptied.

<b>14. TRANSPORT INFORMATION</b>
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**Note:**

DOT Ground - "Non-bulk shipments may be non-regulated per 49CFR 173.150(f)(2)"

**DOT**

UN/ID No.	NA1263
Proper shipping name	Paint, combustible
Hazard Class	Combustible liquid
Packing Group	III

<b>TDG</b>	Not regulated
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<b>MEX</b>	Not regulated
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<b>IATA</b>	Not regulated
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<b>IMDG</b>	Not regulated
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<b>15. REGULATORY INFORMATION</b>
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**International Inventories**

TSCA	Complies
DSL/NDSL	Not Determined
EINECS/ELINCS	Not Determined
ENCS	Not Determined
IECSC	Not Determined
KECL	Not Determined
PICCS	Not Determined
AICS	Not Determined

**Legend:**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List  
 EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
 ENCS - Japan Existing and New Chemical Substances  
 IECSC - China Inventory of Existing Chemical Substances  
 KECL - Korean Existing and Evaluated Chemical Substances  
 PICCS - Philippines Inventory of Chemicals and Chemical Substances  
 AICS - Australian Inventory of Chemical Substances

**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313 - Threshold Values %
2-Butoxy Ethanol - 111-76-2	1.0
Triethylamine - 121-44-8	1.0

**SARA 311/312 Hazard Categories**

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	Yes
Sudden release of pressure hazard	No
Reactive Hazard	No

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**US State Regulations**

This product may contain substances regulated by state right-to-know regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Pennsylvania - Special Hazardous Substances	Pennsylvania - Environmental Hazard List
2-Butoxy Ethanol 111-76-2	X	X	X	-	-
Iron oxide (Fe <sub>2</sub> O <sub>3</sub> ) 1309-37-1	X	X	X	-	-
Titanium Dioxide 13463-67-7	X	X	X	-	-
Triethylamine 121-44-8	X	X	X	-	X
Stoddard solvent, solvent naphta 8052-41-3	X	X	X	-	-
Ethanol, 2-(dimethylamino)- 108-01-0	X	X	X	-	-
2-Propanol 67-63-0	X	X	X	-	X
2-Methoxymethylethoxy propanol 34590-94-8	X	X	X	-	-
Ethylbenzene 100-41-4	X	X	X	-	X
Chromium 7440-47-3	X	X	X	X	X
Nickel 7440-02-0	X	X	X	X	X

**16. OTHER INFORMATION**

Issue Date 08-Apr-2015  
Revision Date 08-Apr-2015  
Revision Note No information available

**Disclaimer**

The information contained herein is derived from data provided by suppliers and other sources believed to be reliable, and is furnished without warranty of any kind. The information relating to the product is for guidance purposes only, is based only on downstream uses known to Watson Standard, and may not be valid for the product used in combination with any other materials. Users of this product must make determinations of suitability and completeness of information from this and all other sources to ensure proper use and disposal of this product, safety and health of employees, customers, and the protection of the environment. Watson Standard will not be liable for any special, incidental, or consequential damages associated with the use or handling of the product.

End of Safety Data Sheet

**WATSON STANDARD®****SAFETY DATA SHEET**

Issue Date 28-Oct-2015

Revision Date 10-Nov-2015

Version 1

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING****Product identifier**

Product Code 3232

**Recommended use of the chemical and restrictions on use**

Recommended Use Reserved for industrial and professional use.

**Details of the supplier of the safety data sheet****Supplier Address**

Watson Industrial Coatings Co. D.B.A Watson Standard  
 616 Hite Road  
 Harwick PA, 15049  
 USA  
 +1-724-275-1000

**Emergency telephone number**

Emergency Telephone Chemtrec 1-800-424-9300

**2. HAZARDS IDENTIFICATION****Classification****OSHA Regulatory Status**

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2

**Hazard symbol(s) /Pictogram(s)****Emergency Overview****Warning****Hazard statements**

H315 - Causes skin irritation

H319 - Causes serious eye irritation

**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

**Precautionary Statements - Response**

Specific treatment (see ? on this label)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

If eye irritation persists: Get medical advice/attention

IF ON SKIN: Wash with plenty of soap and water

If skin irritation occurs: Get medical advice/attention

Take off contaminated clothing and wash before reuse

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IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 Call a POISON CENTER or doctor/physician if you feel unwell  
 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
 Rinse mouth  
 In case of fire: Use CO2, dry chemical, or foam for extinction  
 Evacuate area and fight fire from a safe distance

**Precautionary Statements - Storage**

Store in accordance with local regulations  
 Store in a well-ventilated place. Keep container tightly closed

**Precautionary Statements - Disposal**

Dispose of in accordance with federal, state and local regulations

**Hazards not otherwise classified (HNOC)**

Not Applicable

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS No	Weight-%
2-Butoxy Ethanol	111-76-2	10 - 30
Titanium Dioxide	13463-67-7	1 - 5
Copper(III) phthalocyanine	147-14-8	1 - 5
Triethylamine	121-44-8	1 - 5
Stoddard Solvent, solvent naphta	8052-41-3	0.1 - 1

**4. FIRST AID MEASURES****First aid measures**

**Eye contact** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

**Skin Contact** Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician.

**Inhalation** Move to fresh air in case of accidental inhalation of vapors. If symptoms persist, call a physician.

**Ingestion** If swallowed, call a poison control center or physician immediately. Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice.

**5. FIRE-FIGHTING MEASURES****Suitable extinguishing media**

Use. Dry chemical. Carbon dioxide (CO2). Water spray (fog). Alcohol resistant foam.

**Unsuitable extinguishing media** Do not use a solid water stream as it may scatter and spread fire.

**Specific hazards arising from the chemical**

No information available.

**Explosion data**

**Sensitivity to Mechanical Impact** No.

**Sensitivity to Static Discharge** Yes.

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**Protective equipment and precautions for firefighters**

Wear self-contained breathing apparatus and protective suit.

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures**

**Personal precautions** ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Ensure adequate ventilation, especially in confined areas. Avoid contact with skin, eyes or clothing. All equipment used when handling the product must be grounded. Use personal protection recommended in Section 8. Wash thoroughly after handling.

**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labeled containers. Soak up with inert absorbent material. Clean contaminated surface thoroughly. Prevent product from entering drains. Take precautionary measures against static discharges. Sweep up and shovel into suitable containers for disposal.

**7. HANDLING AND STORAGE****Precautions for safe handling**

**Advice on safe handling** Avoid contact with skin, eyes or clothing. Do not breathe dust/fume/gas/mist/vapors/spray. Wash contaminated clothing before reuse. Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment. Ensure adequate ventilation, especially in confined areas. Remove all sources of ignition. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Never pierce, drill, grind, cut, saw or weld any empty container.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible materials** Strong oxidizing agents. Strong acids. Strong bases.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Control parameters**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH	Exposure Limits
2-Butoxy Ethanol 111-76-2	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m <sup>3</sup> (vacated) TWA: 25 ppm (vacated) TWA: 120 mg/m <sup>3</sup> (vacated) S* S*	IDLH: 700 ppm TWA: 5 ppm TWA: 24 mg/m <sup>3</sup>	Mexico: TWA 26 ppm Mexico: TWA 120 mg/m <sup>3</sup> Mexico: STEL 75 ppm Mexico: STEL 360 mg/m <sup>3</sup>
Titanium Dioxide 13463-67-7	TWA: 10 mg/m <sup>3</sup>	TWA: 15 mg/m <sup>3</sup> total dust (vacated) TWA: 10 mg/m <sup>3</sup> total dust	IDLH: 5000 mg/m <sup>3</sup>	Mexico: TWA 10 mg/m <sup>3</sup> Mexico: STEL 20 mg/m <sup>3</sup>
Copper(III) phthalocyanine 147-14-8	TWA: 1 mg/m <sup>3</sup> Cu dust and mist	-	IDLH: 100 mg/m <sup>3</sup> Cu dust and mist TWA: 1 mg/m <sup>3</sup> Cu dust and mist	-
Triethylamine 121-44-8	STEL: 3 ppm TWA: 1 ppm S*	TWA: 25 ppm TWA: 100 mg/m <sup>3</sup> (vacated) TWA: 10 ppm (vacated) TWA: 40 mg/m <sup>3</sup> (vacated) STEL: 15 ppm (vacated) STEL: 60 mg/m <sup>3</sup>	IDLH: 200 ppm	Mexico: TWA 25 ppm Mexico: TWA 100 mg/m <sup>3</sup> Mexico: STEL 40 ppm Mexico: STEL 160 mg/m <sup>3</sup>

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Stoddard Solvent, solvent naphta 8052-41-3	TWA: 100 ppm	TWA: 500 ppm TWA: 2900 mg/m <sup>3</sup> (vacated) TWA: 100 ppm (vacated) TWA: 525 mg/m <sup>3</sup>	IDLH: 20000 mg/m <sup>3</sup> Ceiling: 1800 mg/m <sup>3</sup> 15 min TWA: 350 mg/m <sup>3</sup>	Mexico: TWA 100 ppm Mexico: TWA 523 mg/m <sup>3</sup> Mexico: STEL 200 ppm Mexico: STEL 1050 mg/m <sup>3</sup>
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NIOSH IDLH *Immediately Dangerous to Life or Health*

**Other Information** Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

#### Appropriate engineering controls

**Engineering Controls** Showers  
Eyewash stations  
Ventilation systems.

#### Individual protection measures, such as personal protective equipment

**Eye/face protection** Tight sealing safety goggles. Face protection shield.

**Skin and body protection** Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

**Respiratory protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Information on basic physical and chemical properties

**Physical state** liquid  
**Odor** Amines  
**Color** opaque, blue

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No information available	
Melting point / freezing point	No information available	
Boiling point / boiling range	No information available	
Flash Point	> 93.5 °C / > 200.0 °F	
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Specific Gravity	1.03	
Water solubility	Soluble in water	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

#### Other Information

**Softening point** No information available

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Molecular weight	No information available
VOC Content (%)	No information available
Density	8.60 lb/gal +/- 0.20
Bulk density	No information available

## 10. STABILITY AND REACTIVITY

### Reactivity

Not Applicable

### Chemical stability

Stable under normal conditions.

### Possibility of Hazardous Reactions

None under normal processing.

<b>Hazardous polymerization</b>	Hazardous polymerization does not occur.
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### Conditions to avoid

Heat, flames and sparks.

### Incompatible materials

Strong oxidizing agents. Strong acids. Strong bases.

### Hazardous Decomposition Products

None under normal use conditions. Thermal decomposition can lead to release of irritating and toxic gases and vapors. Carbon dioxide (CO<sub>2</sub>). Hydrocarbons.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

<b>Product Information</b>	No data available
<b>Inhalation</b>	No data available.
<b>Eye contact</b>	No data available.
<b>Skin Contact</b>	No data available.
<b>Ingestion</b>	No data available.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
2-Butoxy Ethanol 111-76-2	= 470 mg/kg ( Rat )	= 99 mg/kg ( Rabbit )	= 450 ppm ( Rat ) 4 h
Titanium Dioxide 13463-67-7	> 10000 mg/kg ( Rat )	-	-
Triethylamine 121-44-8	= 460 mg/kg ( Rat )	= 415 mg/kg ( Rabbit ) = 570 µL/kg ( Rabbit )	= 1250 ppm ( Rat ) 4 h

### Information on toxicological effects

<b>Symptoms</b>	No information available.
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### Delayed and immediate effects as well as chronic effects from short and long-term exposure

<b>Sensitization</b>	No information available.
<b>Germ cell mutagenicity</b>	No information available.
<b>Carcinogenicity</b>	This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B). This product contains titanium dioxide which is classified as a possible carcinogen when present as respirable dust. This is not relevant for this product since it is a liquid.

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Chemical Name	ACGIH	IARC	NTP	OSHA	Mexico
2-Butoxy Ethanol 111-76-2	A3	Group 3	-	-	-
Titanium Dioxide 13463-67-7	-	Group 2B	-	X	-

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

Not classifiable as a human carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

**Reproductive toxicity**

No information available.

**STOT - single exposure**

No information available.

**STOT - repeated exposure**

No information available.

**Chronic toxicity**

Repeated contact may cause allergic reactions in very susceptible persons. Avoid repeated exposure. May cause adverse effects on the bone marrow and blood-forming system. May cause adverse liver effects.

**Target Organ Effects**

blood, Central nervous system, Eyes, Hematopoietic System, kidney, liver, lungs, Respiratory system, Skin, Central Vascular System (CVS).

**Aspiration hazard**

No information available.

**Numerical measures of toxicity - Product Information**

**Unknown Acute Toxicity**

1.94897999% of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

2.479% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
2-Butoxy Ethanol 111-76-2	-	1490: 96 h Lepomis macrochirus mg/L LC50 static 2950: 96 h Lepomis macrochirus mg/L LC50	1000: 48 h Daphnia magna mg/L EC50 1698 - 1940: 24 h Daphnia magna mg/L EC50
Copper(III) phthalocyanine 147-14-8	-	100: 48 h Oryzias latipes mg/L LC50 static	-
Triethylamine 121-44-8	-	43.7: 96 h Pimephales promelas mg/L LC50 static	200: 48 h Daphnia magna mg/L EC50

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

Chemical Name	Partition coefficient
2-Butoxy Ethanol 111-76-2	0.81
Copper(III) phthalocyanine 147-14-8	6.6
Triethylamine 121-44-8	1.45

**Other adverse effects**

No information available

**13. DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

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**Disposal of wastes** Residual vapors may explode on ignition. Never pierce, drill, grind, cut, saw or weld any empty container. Disposal should be in accordance with applicable regional, national and local laws and regulations. Since empty containers retain product residue, follow label warnings even after container is emptied.

#### 14. TRANSPORT INFORMATION

**DOT** Not regulated  
**TDG** Not regulated  
**MEX** Not regulated  
**IATA** Not regulated  
**IMDG** Not regulated

#### 15. REGULATORY INFORMATION

##### International Inventories

**TSCA** Complies  
**DSL/NDSL** Not Determined  
**ENCS** Not Determined  
**IECSC** Not Determined  
**KECL** Not Determined  
**PICCS** Not Determined  
**AICS** Not Determined

##### Legend:

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

##### US Federal Regulations

##### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313 - Threshold Values %
2-Butoxy Ethanol - 111-76-2	1.0
Copper(III) phthalocyanine - 147-14-8	1.0
Triethylamine - 121-44-8	1.0

##### SARA 311/312 Hazard Categories

**Acute health hazard** Yes  
**Chronic Health Hazard** No  
**Fire hazard** No  
**Sudden release of pressure hazard** No  
**Reactive Hazard** No

##### US State Regulations

This product may contain substances regulated by state right-to-know regulations

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Chemical Name	New Jersey	Massachusetts	Pennsylvania	Pennsylvania - Special Hazardous Substances	Pennsylvania - Environmental Hazard List
2-Butoxy Ethanol 111-76-2	X	X	X	-	-
Titanium Dioxide 13463-67-7	X	X	X	-	-
Copper(III) phthalocyanine 147-14-8	X	-	X	-	-
Triethylamine 121-44-8	X	X	X	-	X
Stoddard Solvent, solvent naphta 8052-41-3	X	X	X	-	-
2-Dimethylaminoethanol 108-01-0	X	X	X	-	-
Cobalt bis(2-ethylhexanoate) 136-52-7	X	-	X	-	-
Cumene 98-82-8	X	X	X	-	X
Naphthalene 91-20-3	X	X	X	-	X
2-Methoxymethylethoxy propanol 34590-94-8	X	X	X	-	-
Ethylbenzene 100-41-4	X	X	X	-	X

#### 16. OTHER INFORMATION

Issue Date 28-Oct-2015  
Revision Date 10-Nov-2015  
Revision Note SDS sections updated 2  
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#### Disclaimer

The information contained herein is derived from data provided by suppliers and other sources believed to be reliable, and is furnished without warranty of any kind. The information relating to the product is for guidance purposes only, is based only on downstream uses known to Watson Standard, and may not be valid for the product used in combination with any other materials. Users of this product must make determinations of suitability and completeness of information from this and all other sources to ensure proper use and disposal of this product, safety and health of employees, customers, and the protection of the environment. Watson Standard will not be liable for any special, incidental, or consequential damages associated with the use or handling of the product.

End of Safety Data Sheet

Issue Date 13-May-2015

Revision Date 13-May-2015

Version 1

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**
Product identifier

Product Code 3425

Recommended use of the chemical and restrictions on use

Recommended Use Reserved for industrial and professional use.

Details of the supplier of the safety data sheetSupplier Address
 Watson Industrial Coatings Co. D.B.A Watson Standard  
 616 Hite Road  
 Harwick PA, 15049  
 724-275-1000
Emergency telephone number

Emergency Telephone Chemtrec 1-800-424-9300

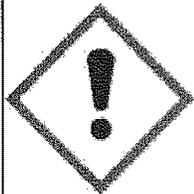
**2. HAZARDS IDENTIFICATION**
ClassificationOSHA Regulatory Status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2

Hazard symbol(s) /Pictogram(s)

## Emergency Overview

WarningHazard statements
 H315 - Causes skin irritation  
 H319 - Causes serious eye irritation
Precautionary Statements - Prevention
 Wash face, hands and any exposed skin thoroughly after handling  
 Wear protective gloves/protective clothing/eye protection/face protection
Precautionary Statements - Response
 Specific treatment (see ? on this label)  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 If eye irritation persists: Get medical advice/attention  
 IF ON SKIN: Wash with plenty of soap and water  
 If skin irritation occurs: Get medical advice/attention  
 Take off contaminated clothing and wash before reuse

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IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 Call a POISON CENTER or doctor/physician if you feel unwell  
 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
 Rinse mouth  
 In case of fire: Use CO2, dry chemical, or foam for extinction  
 Evacuate area and fight fire from a safe distance

**Precautionary Statements - Storage**

Store in accordance with local regulations  
 Store in a well-ventilated place. Keep container tightly closed

**Precautionary Statements - Disposal**

Dispose of in accordance with federal, state and local regulations

**Hazards not otherwise classified (HNOC)****3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS No	Weight-%
2-Butoxy Ethanol	111-76-2	10 - 30
Titanium Dioxide	13463-67-7	10 - 30
Trade Secret Pigment	Proprietary	1 - 5

**4. FIRST AID MEASURES****First aid measures**

**Eye contact** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

**Skin Contact** Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician.

**Inhalation** Move to fresh air in case of accidental inhalation of vapors. If symptoms persist, call a physician.

**Ingestion** If swallowed, call a poison control center or physician immediately. Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice.

**5. FIRE-FIGHTING MEASURES****Suitable extinguishing media**

Carbon dioxide (CO2). Extinguishing powder. Dry chemical. Alcohol resistant foam. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Specific hazards arising from the chemical**

No information available.

**Explosion data**

Sensitivity to Mechanical Impact No.

Sensitivity to Static Discharge Yes.

**Protective equipment and precautions for firefighters**

Wear self-contained breathing apparatus and protective suit.

**6. ACCIDENTAL RELEASE MEASURES**

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**Personal precautions, protective equipment and emergency procedures**

**Personal precautions** ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Ensure adequate ventilation, especially in confined areas. Avoid contact with skin, eyes or clothing. All equipment used when handling the product must be grounded. Use personal protection recommended in Section 8. Wash thoroughly after handling.

**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labeled containers. Soak up with inert absorbent material. Clean contaminated surface thoroughly. Prevent product from entering drains. Take precautionary measures against static discharges. Sweep up and shovel into suitable containers for disposal.

**7. HANDLING AND STORAGE****Precautions for safe handling**

**Advice on safe handling** Avoid contact with skin, eyes or clothing. Do not breathe dust/fume/gas/mist/vapors/spray. Wash contaminated clothing before reuse. Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment. Ensure adequate ventilation, especially in confined areas. Remove all sources of ignition. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Never pierce, drill, grind, cut, saw or weld any empty container.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible materials** Strong oxidizing agents. Strong acids. Strong bases.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Control parameters**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH	Exposure Limits
2-Butoxy Ethanol 111-76-2	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m <sup>3</sup> (vacated) TWA: 25 ppm (vacated) TWA: 120 mg/m <sup>3</sup> (vacated) S* S*	IDLH: 700 ppm TWA: 5 ppm TWA: 24 mg/m <sup>3</sup>	Mexico: TWA 26 ppm Mexico: TWA 120 mg/m <sup>3</sup> Mexico: STEL 75 ppm Mexico: STEL 360 mg/m <sup>3</sup>
Titanium Dioxide 13463-67-7	TWA: 10 mg/m <sup>3</sup>	TWA: 15 mg/m <sup>3</sup> total dust (vacated) TWA: 10 mg/m <sup>3</sup> total dust	IDLH: 5000 mg/m <sup>3</sup>	Mexico: TWA 10 mg/m <sup>3</sup> Mexico: STEL 20 mg/m <sup>3</sup>
Trade Secret Pigment	TWA: 1 mg/m <sup>3</sup> Fe	(vacated) TWA: 1 mg/m <sup>3</sup> Fe	TWA: 1 mg/m <sup>3</sup> Fe	Mexico: TWA 1 mg/m <sup>3</sup> Mexico: STEL 2 mg/m <sup>3</sup>

NIOSH IDLH *Immediately Dangerous to Life or Health*

**Other Information** Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

**Appropriate engineering controls**

**Engineering Controls** Showers  
Eyewash stations  
Ventilation systems.

**Individual protection measures, such as personal protective equipment**

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<b>Eye/face protection</b>	Wear safety glasses with side shields (or goggles).
<b>Skin and body protection</b>	Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.
<b>Respiratory protection</b>	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
<b>General Hygiene Considerations</b>	Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical state</b>	liquid
<b>Odor</b>	Amines
<b>Color</b>	opaque, yellow

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No information available	
Melting point/freezing point	No information available	
Boiling point / boiling range	No information available	
Flash Point	> 94 °C / > 201 °F	Pensky-Martens Closed Cup (PMCC)
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Specific Gravity	No information available	
Water solubility	Soluble in water	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

### Other Information

<b>Softening point</b>	No information available
<b>Molecular weight</b>	No information available
<b>VOC Content (%)</b>	No information available
<b>Density</b>	No information available
<b>Bulk density</b>	No information available

## 10. STABILITY AND REACTIVITY

### Reactivity

Not Applicable

### Chemical stability

Stable under normal conditions.

### Possibility of Hazardous Reactions

None under normal processing.

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Hazardous polymerization      Hazardous polymerization does not occur.

**Conditions to avoid**

Heat, flames and sparks.

**Incompatible materials**

Strong oxidizing agents. Strong acids. Strong bases.

**Hazardous Decomposition Products**None under normal use conditions. Thermal decomposition can lead to release of irritating and toxic gases and vapors. Carbon dioxide (CO<sub>2</sub>). Hydrocarbons.**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure**

<b>Product Information</b>	No data available
<b>Inhalation</b>	No data available.
<b>Eye contact</b>	No data available.
<b>Skin Contact</b>	No data available.
<b>Ingestion</b>	No data available.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
2-Butoxy Ethanol 111-76-2	= 470 mg/kg ( Rat )	= 99 mg/kg ( Rabbit )	= 450 ppm ( Rat ) 4 h
Titanium Dioxide 13463-67-7	> 10000 mg/kg ( Rat )	-	-
Trade Secret Pigment	> 10000 mg/kg ( Rat )	-	-

**Information on toxicological effects**

**Symptoms**      No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization**      No information available.  
**Germ cell mutagenicity**      No information available.  
**Carcinogenicity**      This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B). This product contains titanium dioxide which is classified as a possible carcinogen when present as respirable dust. This is not relevant for this product since it is a liquid.

Chemical Name	ACGIH	IARC	NTP	OSHA	Mexico
2-Butoxy Ethanol 111-76-2	A3	Group 3	-	-	-
Titanium Dioxide 13463-67-7	-	Group 2B	-	X	-

*ACGIH (American Conference of Governmental Industrial Hygienists)*

*A3 - Animal Carcinogen*

*IARC (International Agency for Research on Cancer)*

*Group 2B - Possibly Carcinogenic to Humans*

*Not classifiable as a human carcinogen*

*OSHA (Occupational Safety and Health Administration of the US Department of Labor)*

*X - Present*

<b>Reproductive toxicity</b>	No information available.
<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	No information available.
<b>Aspiration hazard</b>	No information available.

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Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 0.91968905% of the mixture consists of ingredient(s) of unknown toxicity  
The following values are calculated based on chapter 3.1 of the GHS document .

**12. ECOLOGICAL INFORMATION**Ecotoxicity

5.85651% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
2-Butoxy Ethanol 111-76-2	-	1490: 96 h Lepomis macrochirus mg/L LC50 static 2950: 96 h Lepomis macrochirus mg/L LC50	1000: 48 h Daphnia magna mg/L EC50 1698 - 1940: 24 h Daphnia magna mg/L EC50

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Chemical Name	Partition coefficient
2-Butoxy Ethanol 111-76-2	0.81

Other adverse effects

No information available

**13. DISPOSAL CONSIDERATIONS**Waste treatment methodsDisposal of wastes

Residual vapors may explode on ignition. Never pierce, drill, grind, cut, saw or weld any empty container. Disposal should be in accordance with applicable regional, national and local laws and regulations. Since empty containers retain product residue, follow label warnings even after container is emptied.

**14. TRANSPORT INFORMATION**

<u>DOT</u>	Not regulated
<u>TDG</u>	Not regulated
<u>MEX</u>	Not regulated
<u>IATA</u>	Not regulated
<u>IMDG</u>	Not regulated

**15. REGULATORY INFORMATION**International Inventories

TSCA	Complies
DSL/NDL	Not Determined
EINECS/ELINCS	Not Determined
ENCS	Not Determined
IECSC	Not Determined
KECL	Not Determined
PICCS	Not Determined
AICS	Not Determined

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Revision Date 13-May-2015

**Legend:**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List  
 EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
 ENCS - Japan Existing and New Chemical Substances  
 IECSC - China Inventory of Existing Chemical Substances  
 KECL - Korean Existing and Evaluated Chemical Substances  
 PICCS - Philippines Inventory of Chemicals and Chemical Substances  
 AICS - Australian Inventory of Chemical Substances

**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313 - Threshold Values %
2-Butoxy Ethanol - 111-76-2	1.0

**SARA 311/312 Hazard Categories**

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

**US State Regulations**

This product may contain substances regulated by state right-to-know regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Pennsylvania - Special Hazardous Substances	Pennsylvania - Environmental Hazard List
2-Butoxy Ethanol 111-76-2	X	X	X	-	-
Titanium Dioxide 13463-67-7	X	X	X	-	-
Triethylamine 121-44-8	X	X	X	-	X
Silica, amorphous precipitated 112926-00-8	X	X	X	-	-
Stoddard solvent, solvent naphta 8052-41-3	X	X	X	-	-
Ethanol, 2-(dimethylamino)- 108-01-0	X	X	X	-	-
Aluminum oxide (Al <sub>2</sub> O <sub>3</sub> ) 1344-28-1	X	X	X	-	X
Cumene 98-82-8	X	X	X	-	X
Naphthalene 91-20-3	X	X	X	-	X
2-Methoxymethylethoxy propanol 34590-94-8	X	X	X	-	-
Ethylbenzene 100-41-4	X	X	X	-	X

**16. OTHER INFORMATION**

Issue Date

13-May-2015

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Revision Date 13-May-2015

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Revision Date 13-May-2015  
Revision Note No information available

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End of Safety Data Sheet